62nd ISI World Statistics Congress

ISI 2019 Kuala Lumpur

18 - 23 August 2019

SCIENTIFIC PROGRAMME

62nd ISI WORLD STATISTICS CONGRESS 2019

18 - 23 August 2019, Kuala Lumpur

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19th August 2019 (Monday)

Updated as at 17th August 2019

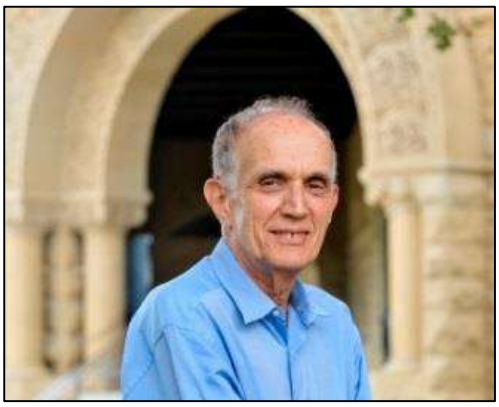
A1.00

8.50 AM – 10.00 AM - Plenary Hall

SIPS-2235: 2018 International Prize in Statistics Winner Lecture

Organiser & Chair: *Helen MacGillivray*

Discussants: *Susan Ellenberg, Noel Cressie*, *Anthony Davison*



Prediction, estimation, and attribution

Bradley Efron, Stanford University, USA

Professor of Statistics and Biostatistics

Abstract: The scientific needs and computational limitations of the Twentieth Century fashioned classical statistical methodology. Both the needs and limitations have changed in the Twenty-First, and so has the methodology. Large-scale prediction algorithms - neural nets, deep learning, boosting, support vector machines, random forests - have achieved star status in the popular press. They are recognizable as heirs to the regression tradition, but ones carried out at enormous scale and on titanic data sets. How do these algorithms compare with standard regression techniques such as Ordinary Least Squares or logistic regression? Several key discrepancies will be examined, centering on the difference between prediction and estimation or attribution (significance testing.) Knowledge of prediction algorithms is not assumed.

B1.00
10.30 AM – 12.30 PM - Plenary Hall

STS-479: Leveraging South-South Cooperation in the Modernization of Official Statistics Towards Supporting the Production of SDG Indicators
Organiser: *Ahmad Mohamad Hussein*
Chair: *Saleh Al Nabit*
Discussant: *Mohd Uzir Mahidin*

Modernization and monitoring SDGs in area of conflicts or in fragile conditions
Ola Awad, Palestinian Central Bureau of Statistics, State of Palestine

Prioritisation of Sustainable Development Goals and efforts of SESRIC to support statistical modernisation in OIC member countries
Nebil Dabur, Statistical, Economic and Social Research and Training Centre for Islamic Countries (SESRIC), Turkey

Modernisation of statistical systems - Experiences of GCC-Stat
Sabir Al Harbi, GCC Statistical Center, Saudi Arabia

Morocco's experience in South/South cooperation and statistical capacity building
Belkacem Abdous, High Commission for Planning, Morocco

Modernization of the Tunisian Statistical System and its impact on statistical production for SDGs
Hedi Saidi, National Institute Statistics of Tunisia

B1.01
10.30 AM – 12.30 PM - Ballroom 2

IPS-355: ISI History Session
Organiser & Chair: *Peter Guttorp*

Elizabeth L. Scott: A portrait of the statistician as a young woman
Amanda L Golbeck, University of Arkansas for Medical Sciences, USA

Steve O. Rice (1907 – 1986) – Inspired by random noise, inspiring statistics research
Georg Lindgren, Lund University, Sweden

A view on 50 years of life of the ISI: (With a focus on ISI relations with official statistics)
Jean-Louis Bodin, Former ISI President, France

Panellists
- *Thordis Thorarinsdottir, Norwegian Computing Center, Norway*
- *Wendy Martinez, Bureau of Labor Statistics, Washington, USA*

B1.02
10.30 AM – 12.30 PM - Banquet Hall

IPS-65: Statistics in Forensic Science
Organiser: *Tamanna Howlader*
Chair: *Paulo Canas Rodrigues*

The critical role of statistics in Forensic Science
Karen Kafadar, University of Virginia, USA

Estimating damages in the largest EU cartel case
Svetlana Borovkova, Vrije Universiteit Amsterdam / Probability & Partners, Netherlands

Expert evidence: civil law, epidemiology and data quality
Jane L Hutton, University of Warwick, UK

B1.03
10.30 AM – 12.30 PM - Conference Hall 1

STS-564: Integrating Micro- and Macro-Data for Better Credit Assessment
Organiser: *Eric Chin*
Chair: *Dennis Martin*

Developing a world-class credit reporting industry in Malaysia: Challenges and the way forward
Eric Chin, CTOS Data Systems Sdn Bhd, Malaysia

Credit assessment: From a credit provider's perspective
Vincent Mok, CIMB Bank Berhad, Malaysia

CCRIS and its role in promoting financial stability
Rosnizam Saari, Bank Negara Malaysia

B1.04
10.30 AM – 12.30 PM - Conference Hall 2

IPS-178: For Better Statistics; Good Communication Between Users and Compilers
Organiser: *Bruno Tissot*
Chair: *Naruki Mori*

Communicating on Lebanese inflation: Deciphering the impact of imported inflation
Sana Antoine Souaid Jad, Central Bank of Lebanon

The importance of communication between compilers and users in improving the quality of statistics: The Bank of Japan's experience
Kuniko Moriya, Bank of Japan

Bringing users and compilers together – effective building on data driven supervision
Tim Danner, Netherlands Bank

Stakeholder engagement throughout the statistical value chain – views from South Africa
Barend Christoffel de Beer, South African Reserve Bank

Let's talk! – Communicating statistics across Europe through the DIGICOM programme
Sybille Luhmann, Eurostat, Luxembourg

Internal communication with users at the Deutsche Bundesbank: Improving statistics and analytics
Stephan Müller, Deutsche Bundesbank, Germany

B1.05
10.30 AM – 12.30 PM - Conference Hall 3

IPS-29: Statistical Meta-Analysis with Applications in Health Sciences
Organiser & Chair: *Shahjahan Khan*
Discussants: *Louise M Ryan, Suhail A R Doi*

Perioperative outcomes of Laparoscopic Assisted Rectal Resection (LARR) vs Open Rectal Resection (ORR) for carcinoma: A meta-analysis and systematic review
Muhammed Ashraf Memon, University of Queensland, Australia

Meta-analysis and systematic review of randomized controlled trials comparing Laparoscopic Roux-En-Y Gastric Bypass (LRYGB) versus Laparoscopic Vertical Sleeve Gastrectomy (LVSG) for weight loss outcomes
Rossita M Yunus, University of Malaya, Malaysia

The Doi plot and the LFK index for detecting bias in meta-analysis
Luis Furuya-Kanamori, Australian National University

Selecting the best meta-analytic estimator for epidemiology: A simulation study
Suhail A R Doi, Qatar University

B1.06
10.30 AM – 12.30 PM – Plenary Theatre Auditorium

STS-2533: Big Data Analytics
Organiser: *Ahmad Razlan Alias*
Chair: *Siti Haslinda Mohd Din*

Big data analytics for 21st Century learning
Badrul Hisam Besri, TM ONE, Malaysia

B1.07
10.30 AM – 12.30 PM - Meeting Room 301

IPS-254: Stratified Psychiatry and Precision Medicine
Organiser: *Thaddeus Tarpeynyior*
Chair: *Todd Ogden*

Handling missing scalar and functional data in integrative analysis with applications to mental health research
Adam Ciarlegio, George Washington University, USA

Statistical modeling for psychiatric nosology
Thaddeus Tarpey, New York Universtiy, USA

Functional data analysis for activity profiles from wearable devices
Ian McKeague, Columbia University, USA

Sequential assessment strategies for making individual treatment decisions
Eva Petkova, New York University, USA

B1.08
10.30 AM – 12.30 PM - Meeting Room 302

IPS-153: Transforming Population and Migration Statistics with Administrative Data
Organiser: *Ann Blake*
Chair: *Robert Bumpstead*

Population estimation from administrative sources; discussion of some of the methodological challenges with potential solutions
James Brown, University of Technology Sydney, Australia

International approaches to admin-based population estimates (Office for National Statistics, UK)
Becky Tinsley, Office of National Statistics, UK

Progress in New Zealand using linked administrative sources for the census and population statistics
Christine Bycroft, Statistics New Zealand

Estimation of Gross Population Flows when Statistical Population Datasets (SPDs) are incomplete
John Dunne, Central Statistics Office, Ireland

UK progress on putting administrative data at the core of migration statistics
Jay Lindop, Office for National Statistics, UK

B1.09
10.30 AM – 12.30 PM - Meeting Room 303

IPS-115: Statistical and Data Literacy Education for Life
Organiser: *Helen MacGillivray*
Chair: *John Harraway*
Discussant: *Gail Burrill*

ISLP challenges alternative truths
Reija Helenius, Statistics Finland

Turning data users into data scientists
Matthew Parry, University of Otago, New Zealand

Creating data-rich tools for decision makers: The case of the constituency explorer
James Robert Nicholson, University of Durham, UK

Getting the foundations right
Helen MacGillivray, ISI President

B1.10
10.30 AM – 12.30 PM - Meeting Room 304

IPS-192: Providing Official Statistics for Small Areas
Organiser: *Balgobin Nandram*
Chair: *Ray Chambers*

A Bayesian approach to providing official statistics for wards in the Nepal census
Balgobin Nandram, Worcester Polytechnic Institute, USA

Small area prediction of counts under nonparametric generalized linear mixed model
Hukum Chandra, Indian Agricultural Statistics Research Institute

Estimation of median household income for small areas: A Bayesian semiparametric approach
Dhiman Bhadra, Indian Institute of Management Ahmedabad

Covariance based moment equations for improved variance component estimation
Sanjay Chaudhuri, National University of Singapore

B1.11
10.30 AM – 12.30 PM - Meeting Room 305

IPS-147: Building Future Generations of Statisticians through Outreach
Organiser: *Ayse Aysin Bombaci Bilgin*
Chair: *Caterina Primi*
Discussant: *Manfred Borovnick*

Epidemiological concepts as a foundation for inductive reasoning in harnessing the potential of big data for evidence-based healthcare
Rossi Hassad, Mercy College, USA

Statistics: your ticket to anywhere!
Ayse Aysin Bombaci Bilgin, Macquarie University, Australia

Systems thinking for statistics education
Peter Howley, Newcastle University, Australia

Reinventing a design game to teach real world data skills through simulated data
David Stern, University of Reading, UK

B1.12
10.30 AM – 12.30 PM - Meeting Room 306

IPS-294: Increasing Domain Experts' Engagement with Statistics Through Statistical Collaboration Laboratories
Organiser: *Eric Vance*
Chair: *Atinuke Olusola Adebanji*
Discussant: *Eric Vance*

University - Industry partnerships: Experiences from India
Bhaswati Ganguli, University of Calcutta, India

The impact of statistical collaboration center on non – statistician, Wolkite University, Ethiopia
Kassahun Trueha Dumga, Wolkite University, Ethiopia

Enhancing food security in Pakistan with advanced statistical knowledge and tools through effective statistical collaboration
Muhammad Amin, Nuclear Institute for Food and Agriculture, Pakistan

Building Manpower in the field of statistical sciences for business and industry in North Central Nigeria
Monday Osagie Adenomon, Nasawara State University, Nigeria

B1.13
10.30 AM – 12.30 PM - Meeting Room 401

IPS-154: Recent Developments in Discrete Models
Organiser: *Seng Huat Ong*
Chair: *Ashis SenGupta*

Log-concavity of Discrete Distributions
Ramesh C. Gupta, University of Maine Orono, USA

Relative dispersion indexes for multivariate count distributions
Celestin Kokonendji, Université Bourgogne Franche-Comté - UFR Sciences Et Techniques UFC, France

The Conway-Maxwell-Poisson stochastic process for dispersed count data
Kimberly F Sellers, Georgetown University, USA

Bivariate Generalized Inverse Trinomial and related distributions
Seng Huat Ong, UCSI University, Malaysia

Statistical Inference for a family of count distributions for modelling dispersion
Shin Zhu Sim, Universiti Tunku Abdul Rahman, Malaysia

Curate rate models under Different Activation Schemes: Role of discrete distributions
Subrata Chakraborty, Dibrugarh University, India

B1.14
10.30 AM – 12.30 PM - Meeting Room 402

IPS-152: Special Purpose Entities: Relevance and Impact of Harmonized Concepts and Measurement Challenges
Organiser: *Tjeerd Jellema*
Chair: *Andrea Silke Stapel-Weber*
Discussants: *Peter Van De Ven, Carlos Sanchez-Munoz*

IMF Task Force final report on Special Purpose Entities (SPEs): Compilation issues and implementation in Luxembourg
Paul Feuvrier, Banque Central de Luxembourg

Special Purpose Entities: Relevance and impact of harmonised concepts and measurement challenges – UK contribution
Sami Hamroush, Office of National Statistics, UK

Pass-through equity in nonresident Special Purpose Entity affiliates of U.S. multinational enterprises
Ryan Noonan, Bureau of Economic Analysis, USA

Irish Special Purpose Vehicles (SPVs): Concepts and challenges of the implementation of the new definition of the IMF Task-Force
Giovanna Bua, Central Bank, Ireland

B1.15
10.30 AM – 12.30 PM - Meeting Room 403

IPS-280: Improving Survey Designs for Official Statistics: Experiences from Some Southeast Asian Countries
Organiser & Chair: *Kevin Carl Pena Santos*

Sampling design proposal for household survey in Cambodia with provincial domain
Thy Veun, National Institute of Statistics Cambodia

Model-assisted estimation using panel data and data from independent samples for the family income and expenditure survey
Mae Abigail Miralles, Philippine Statistics Authority

Survey design for quarterly labor force survey in Lao P.D.R.
Somsamay Norasane, Lao Statistics Bureau

Research report on the redesigning of the Backyard Livestock and Poultry Survey
Jay Manlapaz, Philippine Statistics Authority

Redesigning of Palay Production Survey
Divina Gracia L. Del Prado, Philippine Statistics Authority

B1.16
10.30 AM – 12.30 PM - Meeting Room 404

IPS-157: Analysis of High-Dimensional Spatio-Temporal Processes with Applications in Environmental Studies
Organiser: *Giovanna Jona Lasinio*
Chair: *Chun-Houh Chen*
Discussant: *Hsin-Cheng Huang*

Dimension-reduced inference for spatio-temporal changes of Arctic sea ice
Noel Cressie, University of Wollongong, Australia

Assessment of Beijing's air pollution with adjustment to meteorological confounding
Song-Xi Chen, Iowa State University, USA

High-dimensional matrix autoregressive models with applications to spatial lattice data
Nan-Jung Hsu, National Tsing-Hua University, Chinese Taipei

B1.17
10.30 AM – 12.30 PM - Meeting Room 405

IPS-155: Improving Access to and Sharing of Granular Data – International Experiences
Organiser: *Christian Hirsch*
Chair: *Maurice Brandt*

Introduction to INEXDA's metadata schema
Christian Hirsch, Deutsche Bundesbank, Germany

How Banca d'Italia disseminates granular statistics to external researchers: The case of firms' and households' survey data
Laura Bartiloro, Banca d'Italia, Italy

Sharing and using financial microdata
Manuel Sánchez Valadez, Banco de México

Data sharing under confidentiality: The CBRT case
Berkay Akişoğlu, Central Bank of the Republic of Turkey

INEXDA - The granular data network
Renaud Lacroix, Banque de France

B1.18
10.30 AM – 12.30 PM - Meeting Room 406

IPS-103: Financial Time Series Modeling, Count Data, High Frequency, and Volatility
Organiser: *Bovas Abraham*
Chair: *Manoj Chacko*

Improved estimation of wealth indices from asset counts
Giovanni Merola, Xi'an Jiaotong-Liverpool University, China

Coherent Forecasting for Over dispersed Integer Autoregressive Model
Manik Awale, Savitribai Phule Pune University, India

Time Series Approach for Modelling the Merger and Acquisition Series: An Application to Indian Banking System
Jitendra Kumar, Central University of Rajasthan, India

B1.19
10.30 AM – 12.30 PM - Meeting Room 407

STS-580: Advances and Applications of Statistical Process Monitoring
Organiser: *Sotiris Bersimis*
Chair: *Tahir Ekin*

An approach to monitoring multivariate time between events
Ross Stewart Sparks, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia

Healthcare fraud detection using machine learning approaches
Vassilis Plagianakos, University of Thessaly, Greece

Monitoring pharmaceutical expenditures using SPM techniques
Elisavet Nika, Athens University of Economics and Business, Greece

Controlling data quality in the presence of missing data using multivariate control charts
Tahir Mahmood, City University of Hong Kong

Statistical control of Shewhart control charts
Rob Goedhart, University of Amsterdam, Netherlands

Integrating Process Monitoring Techniques and Scan Statistics for Monitoring Public Health
Sotiris Bersimis, University of Piraeus, Greece

B1.20
10.30 AM – 12.30 PM - Meeting Room 408

STS-513: The Development of Sustainable Development Goals (SDGs) Indicator System: The Philippine Case
Organiser & Chair: *Josefina Venegas Almeda*
Discussants: *Arturo Martinez, Wilma Guillen*

The indicator system for Sustainable Development Goals (SDGs) monitoring in the Philippines: Its current status
Michelle Viernes, Philippine Statistics Authority

Expanding the Philippine indicator system for Sustainable Development Goals (SDGs) monitoring through research
Jessa Sarita Lopez, University of Philippines

Operationalization and institutionalization of the newly developed indicators for monitoring the Sustainable Development Goals (SDGs): The next step
Sabrina Ocampo Romasoc, Philippine Statistical Research and Training Institute

Collaborative arrangements in promoting the Sustainable Development Goals (SDGs) at the local level
Maria Praxedes Reyes Peña, Philippine Statistical Research and Training Institute

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B1.21
10.30 AM – 12.30 PM - Meeting Room 409

STS-447: Importance and Development of Merchandise Trade Indicators
Organiser: *Wan Siti Zaleha Wan Zakaria*
Chair: *Mahinthan J. Mariasingham*

Mirror analysis
Mila Hertinmalyana, Badan Pusat Statistik, Indonesia

Trade imbalances and trade asymmetries: Two sides of a complex relation
Ronald Jansen, United Nations Statistics Division (UNSD), USA

Development in merchandise trade indicators
Valdone Kasperiuniene, European Commission, Luxembourg

Quantifying China's involvement and participation in global value chains
Donald Jay Mari Bertulfo, Asian Development Bank, Philippines

The rise of China and the Malaysian electronics and electrical sector (A bilateral trade view)
Kok Onn Ting, Ministry of Economic Affairs, Malaysia

Determinants of Afghanistan's Exports: A Gravity Model Approach
Mohammad Salim Sadid, South Asian University, India

B1.22
10.30 AM – 12.30 PM - Meeting Room 410

STS-346: Detection and Handling of Outliers in Big Data
Organiser: *Rahmatullah Imon*
Chair: *Ali S. Hadi*
Discussant: *Atikur Rahman Khan*

Identification of multiple unusual observations in spatial regression
Rahmatullah Imon, Ball State University, USA

Identification of high leverage points in linear functional relationship model for big data
Abu Sayed Md. Al Mamun, Rajshahi University, Bangladesh

Outlier detection method in circular data
Yong Zulina Zubairi, University of Malaya, Malaysia

Robust VIF-Regression screening for big data
Hassan S Uraibi, University of Al-Qadisiyah, Iraq

CE1.01
12.30 PM - 1.10 PM - Foyer Level 3 (East)

CPS1966-01: Identifying preferred life insurance products using classification trees, multinomial logistic regression, and random forest
Jessa Luzelle Cuaresma, University of the Philippines

CPS2036-02: Identifying survey location using GIS: A case study on Malaysia Employment Survey in oil palm plantations, 2018
Mahdir Bahar, Department of Statistics Malaysia

CPS2297-03: Food security/ insecurity and policy responses in Sri Lanka: A theoretical review
Pala Mullalage Prasad Anura Kumara, Department of Census & Statistics, Sri Lanka

CPS2213-04: The evolution of foreign direct investment in Malaysia
Syamimi Shahbudin, Department of Statistics Malaysia

CPS2705-05: Relationship of inflation with imports and exports in Malaysia
Wan Siti Zaleha Wan Zakaria, Department of Statistics Malaysia

CPS2216-06: A study on the training effectiveness in school (Cluster) of methodology, research and quality, ILSM
Norbani Yacob, Department of Statistics Malaysia

CPS795-07: Stochastic modeling of the impact of climate change on the variability of daily rainfall in Benin
Nestor Bokossa, CIPMA-CHAIR UNESCO (UAC-Benin)

CPS2044-08: Parametric Weibull time-varying covariate model for HIV-TB mortality
Siti Afiqah Muhammad Jamil, Universiti Tun Hussein Onn Malaysia

CPS1351-09: Analysis of a Vaccination Mathematical model on infectious measles disease
Hope Ifeyinwa Mbachu, Imo State University, Nigeria

CPS861-10: Comparative analysis of design-based and synthetic estimates of ownership of farm equipment and facilities for the 2002 Census of Agriculture
Madeline Dumaua Cabauatan, Polytechnic University of the Philippines

CPS886-11: A new regression model for positive random variables
Marcelo Bourguignon Pereira, Universidade Federal Do Rio Grande Do Norte, Brazil

CPS1060-12: Using machine learning technique to classify geographic areas with socioeconomic potential for broadband investment
Tan Taik Guan, University of Nottingham, Malaysia

CPS2047-13: Silver tsunami in Kulai 2010-2020
Kamaruzaman Mohamed, Department of Statistics Malaysia

CPS1053-14: Research on the estimation method of reference rate in FISIM accounting
Zhi Xiu Du, Inner Mongolia University of Finance and Economics, China

CPS2215-15: A theoretical framework for analyzing instructors' beliefs, attitudes, and practices in the context of quantitative reasoning
Gerald Iacullo, Berkeley College, USA

CPS904-16: How ICT statistics facilitate countries for achieving the Sustainable Development Goals (SDGs) with focusing on Iran's ICT statistics
Saeed Fayyaz, Statistical Center of Iran

CW1.01
12.30 PM - 1.10 PM - Foyer Level 3 (West)

CPS1113-24: Instrumental variable analysis in healthcare delivery science: Underutilized yet valuable
Madhu Mazumdar, Icahn School of Medicine at Mount Sinai, USA

CPS2125-25: Small area estimation for linear parameter under a spatial unit-level lognormal model
Dian Handayani, Bogor Agricultural University, Indonesia

CPS1137-26: Indicators of schooling development
Mamadou Youry Sall, Gaston Berger University, Senegal

CPS2141-27: Factors influencing the economic growth using state Gross Domestic Product (GDP): A case study of Negeri Sembilan
Kok Hwa Lim, Department of Statistics Malaysia

CPS1188-28: General class of Ratio-cum-Product estimators in Two-Phase sampling using Multi-Auxiliary variables
Peter Ibikunle Ogunyinka, Olabisi Onabanjo University, Nigeria

CPS2062-29: Household consumption expenditure patterns in Malaysia
Fatihah Ariffin, Department of Statistics Malaysia

CPS1144-30: Forecast error variance analysis on the impact of foreign exchange rate volatility on Nigeria export growth
Oluwafemi Clement Onifade, University of Abuja, Nigeria

CPS2531-31: The evolution of Environment Statistics in Department of Statistics Malaysia
Zaitun Mohd Taha Abd. Rahman, Department of Statistics Malaysia

CPS2084-32: Model averaging on household income to examine the poverty in Malaysia
Siti Aisyah Mohd Padzil, Universiti Tun Hussein Onn Malaysia

CPS2237-33: Towards measuring the digital economy: Initiative and challenges
Yusrina Mohd Yusoff, Department of Statistics Malaysia

CPS2097-34: Stock market network analysis: Evidence from the Bursa Malaysia
Hafizah Bahaludin, International Islamic University Malaysia

CPS2543-35: A comparison between annual maximum and partial duration series of high-flow at Langat River
Firdaus Mohamad Hamzah, Universiti Kebangsaan Malaysia

CPS2475-36: Estimation of the prevalence of depression via the latent class model using the National Health Survey Sample, 2013
Rita de Cássia de Lima Idalino, Federal University of Piauí (UFPI), Brazil

CPS1467-37: A new difference method for variance estimation in Non-Parametric regression models
Magda Mohamed Haggag, Damanhour University., Egypt

CPS1143-38: Benchmarking of national accounts statistics in Nepal
Jishnu Mohan Bhattarai, National Statistical Institute, Nepal

CPS1145-39: On jumps models, newly asymmetric innovations in volatility models and applications
Oyebimpe Emmanuel Adeniji, Ibadan University., Nigeria

CE1.02
1.20 PM - 2.00 PM - Foyer Level 3 (East)

CPS1213-01: Measurement the effect of black campaign to Indonesia's crude palm oil export: Analysis time series error correction mechanism
Annisa Nur Fadhilah, Badan Pusat Statistik, Indonesia

CPS2299-02: Data preparation: DOSM Statistics Data Warehouse practice
Ahmad Sauqi Haris, Department of Statistics Malaysia

CPS1218-03: Evaluating agreement between ratings on the Patient Global Impression of Improvement (PGI-I) scale and the Clinical Global Impressions – Improvement (CGI-I): Random effects linear models for estimating intraclass correlation coefficients for reliability research
Mohammadreza Mohebbi, Deakin University, Australia

CPS1219-04: Bayesian analysis of REER-SAARC Series using C-AR model with spherically symmetric error
Ashok Kumar, Central University of Rajasthan, India

CPS2048-05: Efficiency analysis by combination of parametric and non- parametric approach: Evidence from Bursa Malaysia
Md Zobaer Hasan, Monash University, Malaysia

CPS2008-06: Fitting statistical models to daily rainfall data at Penang International Airport using Gamma and Weibull distributions
Syafrina Abdul Halim, Universiti Putra Malaysia

CPS2217-07: Addressing the contribution of foreign investment to Malaysia's economy
Mohd Harith Faiz Md Saad, Department of Statistics Malaysia

CPS1832-08: Fuzzy rule base method for forecasting time series data
Nur Fazliana Rahin, Universiti Teknologi Petronas, Malaysia

CPS1234-09: Green development and green development index under the background of ecological civilization pilot zone
Yongping Peng, Statistic Bureau of Jiangxi, China

CPS1240-10: The determinants of remittances a case from Oman
Abdulaziz Al Rahbi, Central Bank of Oman

CPS2280-11: The ultimate comprehensive statistical frame: Busting the myth
Hidzir Hamzah, Department of Statistics Malaysia

CPS2274-12: Outlier detection in official statistics
Nadiah Mohamed, University of Malaya, Malaysia

CPS1249-13: Statistics' importance to assess food security in the 2030 agenda
Said Zarouali, High Commission for Planning, Morocco

CPS1252-14: Global coral species diversity and its relationship with environmental factors
Hungyen Chen, National Taiwan University

CPS1253-15: Quantification of the effect of the priors in Bayesian statistics via Stein's Method: An illustration based on the Gamma distribution
Fatemeh Ghaderinezhad, Gent University, Belgium

CW1.02
1.20 PM - 2.00 PM - Foyer Level 3 (West)

CPS2137-24: Detecting outlier in a circular regression model – A review
Intan Mastura Binti Ramlee, University Malaysia Perlis (UNIMAP)

CPS2078-25: The importance of SUA as part of cost of living
Manisah Othman, Department of Statistics Malaysia

CPS1332-26: Two sides of the same statistical medal - academic and official statistics, examples for the Bosnia and Herzegovina
Fahir Kanlic, Agency for Statistics of Bosnia and Herzegovina

CPS2302-27: Quarterly employment survey & establishment approach in development of labour demand statistics
Mohammad Faris Roslan, Department of Statistics Malaysia

CPS1298-28: Adjusting tolerance limits for difference between coordinates used to link agricultural producers' records
Andrea Silva, Brazilian Institute of Geography and Statistics (IBGE), Brazil

CPS2350-29: Bayesian network approach to the causal influence of socioeconomic status on infectivity of dengue
Alaba Ajibola Lamidi-Sarumoh, Universiti Putra Malaysia

CPS2265-30: Factors affecting the gross output value of real estate sub sector in Malaysia
Wan Rahifah Wan Ramli, Department of Statistics Malaysia

CPS1302-31: Multiple imputation: An iterative regression imputation
Bintou Traore, University of Lagos, Nigeria

CPS1310-32: Exploring potential leading economic indicator system of the Philippines
Jo Louise Lagrada Buhay, Philippine Statistics Authority

CPS1319-33: Dealing with seasonal commodities on prices received index for farmers in Indonesia: Simulation scenarios of horticultural commodities in Central Java Province
Masarina Flukeria, Badan Pusat Statistik, Indonesia

CPS1320-34: Simultaneous confidence bands for copula density based on linear wavelet estimator
Cheikh Tidiane Seck, Universite Alioune Diop de Bambey, Senegal

CPS2544-35: Trend analysis and return period of sea level on West Coast of Peninsular Malaysia
Firdaus Mohamad Hamzah, Universiti Kebangsaan Malaysia

CPS2267-36: Gap analysis of administrative data source: Practises of Department of Statistics Malaysia
Noor Ilyana Mat Zain, Department of Statistics Malaysia

CPS2021-37: The Social-Demographic effects on earning and its differentials in public and private sector
Nor Hanizah Abu Hanit, Institute for Medical Research (IMR), Ministry of Health (MOH), Malaysia

CPS2228-38: Correlation between salary and number of employees in manufacturing sector with the presence of outliers
Mohd Zulhairi Omar, Department of Statistics Malaysia

CPS2056-39: Validation of measurement instrument for survey research: A review of rating scales related factors
Nurul Hafizah Azizan, Universiti Teknologi MARA, Malaysia

LTDG1.08
12.50 PM – 1.45 PM - Meeting Room 302

Hard-to-Survey Meeting
Chair: *Natalie Shlomo*

Associations & Special Interest Groups:
International Association for Official Statistics (IAOS), International Association of Survey Statisticians (IASS)

- Can we adapt existing methodology to investigate hard-to-survey populations?
- Do we need to develop alternative solutions and if so, what solutions are available and how should they be prioritised?
- Can we build joint activities, collaborations and relevant training to develop new methodologies related to hard-to-survey populations?

LTDG1.10
12.50 PM – 1.45 PM - Meeting Room 304

Building Partnerships with the Geospatial Information Community
Chair: *Steven Vale*

Associations & Special Interest Groups:
International Association for Official Statistics (IAOS), Standing Committee of Regional and Urban Statistics (SCORUS)

- How have you developed new partnerships to integrate statistical and geospatial information?
- What outcomes have you achieved or planned?

LTDG1.11
12.50 PM – 1.45 PM - Meeting Room 305

Modelling Big Data: probability distributions, theory and application, variability and change points
Chair: *Matthew Ekum*

Associations & Special Interest Groups:
Bernoulli Society (BS)

- Is prior knowledge of probability distributions necessary in machine learning?
- What are the best criteria to determine the best distribution model for fitting Big data?
- What does the future hold, in the era of Data Science, for statisticians in general and for those in the field of probability theory and applications in particular?

LTDG1.12
12.50 PM – 1.45 PM - Meeting Room 306

Efficiency of the Zero-Inflated Poisson Model and the HURDLE model to handle responses with excess zero counts
Chair: *Amila Poddar*

Associations & Special Interest Groups:
Bernoulli Society (BS), International Association for Statistical Computing (IASC)

- What are the best ways to apply models with different distributional assumptions on the data?

D1.00
2.00PM – 3.40 PM - Plenary Hall

IPS-269: Multidimensional Poverty: How to Measure?
Organiser & Chair: *Nazaria Baharudin*
Discussant: *Norma Mansor*

The multidimensionality of poverty: Meaning and measurement
Wei San Loh, World Bank

Statistical robustness of the global Multidimensional Poverty Index
Sabina Alkire, University of Oxford, UK

Malaysia Challenges to Implement MPI
Abdul Halim Abdul Aziz, Ministry of Economic Affairs, Malaysia

Income Inequality and Ethnic Cleavages in Malaysia Evidence from Distributional National Accounts (1984-2014)
Muhammed Abdul Khalid, Prime Minister's Office of Malaysia

D1.01
2.00PM – 3.40 PM - Ballroom 2

IPS-176: Statistical Challenges in the Monitoring of Commercial Property Markets
Organiser: *Bruno Tissot*
Chair: *Gülbin Sahinbeyoglu*

Commercial real estate indicators: Prices and beyond
Jens Mehrhoff, Eurostat, Luxembourg

Closing data gaps in the monitoring of commercial real estate bank lending
Massimiliano Affinito, Bank of Italy

Compilation of the Commercial Property Price Index (CPPI) and its use in Japan
Chihiro Shimizu, National University of Singapore

Constructing a commercial property price index for Turkey
Ezgi Deryol, Central Bank of Turkey

Progress in measurement of prices and activity in German commercial property market
Thomas Knetsch, Deutsche Bundesbank, Germany

D1.02
2.00PM – 3.40 PM - Banquet Hall

IPS-245: Modeling of Multivariate and Non-Gaussian Dependent Data with Applications
Organiser: *Scott H Holan*
Chair: *Harrison Quick*

Interpolating distributions for populations in nested geographies using public-use data with application to the American community survey
Scott H Holan, University of Missouri, USA

Hierarchical model for spatial temporal modeling of extremes
Katherine B Ensor, Rice University, USA

Dynamic mixed frequency pooled copula
Hedibert Lopes, Institute of Education and Research, Brazil

What is the best predictor that you can compute in five minutes?
Jonathan R Bradley, Florida State University, USA

D1.03
2.00PM – 3.40 PM - Conference Hall 1

IPS-262: Recent Developments in Stein's Method
Organiser & Chair: *Adrian Roellin*

Wasserstein-2 bounds in normal approximation under local dependence
Xiao Fang, Chinese University of Hong Kong

Approximations to heavy tailed distributions
Lihu Xu, University of Macau, China

Cramer-type moderate deviation of normal approximation for unbounded exchangeable pairs
Zhuosong Zhang, University of Melbourne, Australia

D1.04
2.00PM – 3.40 PM - Conference Hall 2

IPS-255: The Many Faces of Entropy, Extropy, and Information
Organiser: *Nozer Darabsha Singpurwalla*
Chair: *Rob Goedhart*
Discussant: *Tom Mazzuchi*

Entropies, guessing, searching and information theory
Serdar Boztas, RMIT University, Australia

Information theory in reliability
Tom Mazzuchi, George Washington University, USA

Entropy and Extropy in the Courtroom
Tahir Mahmood, City University of Hong Kong

D1.05
2.00PM – 3.40 PM - Conference Hall 3

IPS-35: Imaging statistics and predictive data analytics
Organiser: *Ivo Dinov D*
Chair: *Tahir Ekin*

Implicit bias in big data analytics
Ejaz Ahmed S, Brock University, Canada

A generative deep machine modeling framework for hypothesis testing and comparing neuroimaging data
Eric Ho Tatt Wei, Universiti Teknologi PETRONAS, Malaysia

The default mode network after 20 years: Statistical perspectives
Michelle Liou, Institute of Statistical Science Academia Sinica, Chinese Taipei

Predictive analytics of big neuroscience data
Ivo Dinov D, University of Michigan, USA

Phenotypes, genotypes & voxels: A playground next to a nuclear power plant
Anqi Qiu, National University of Singapore

D1.06
2.00PM – 3.40 PM - Plenary Theatre Auditorium

IPS-108: Advances in Optimal Design Construction and Applications
Organiser: *Weng Kee Wong*
Chair: *Han-Ming (Hank) Wu*

Response driven study designs for multivariate longitudinal data
Jonathan Schildcrout, Vanderbilt University, USA

An exact algorithm for the optimal experimental design problem
Selin Damla Ahipasaoglu, Singapore University of Technology and Design

On use of metaheuristic algorithms for finding optimal designs
Weng Kee Wong, University of California, USA

D1.07
2.00PM – 3.40 PM - Meeting Room 301

IPS-210: Forecasting by Combining Hard and Soft Data
Organiser & Chair: *Chuah Kue Peng*

Effects of external assumptions on forecast errors
Christoph Schult, Leibniz-Institut Für Wirtschaftsforschung Halle (IWH), Germany

Unemployment forecasting using support vector regression
Bas Scheer, Bureau for Economic Policy Analysis (CPB), Netherlands

Forecasting inflation with survey data: The case of Singapore
Chow Hwee Kwan, Singapore Management University

D1.08
2.00PM – 3.40 PM - Meeting Room 302

IPS-248: Cutting-Edge Applications of Formal Privacy in NSOs: Lessons Learned and Thoughts on Future Implementations Around the World
Organiser: *John Maron Abowd*
Chair: *Lars Vilhuber*

The United States Census Bureau adopts differential privacy
John Maron Abowd, United States Census Bureau

Differential privacy from a statistical perspective – obtaining valid inferences from differentially private microdata
Jörg Drechsler, Institute for Employment Research (IAB), Germany

ABS Tablebuilder: Leading edge advancements in automated tabular confidentialisation from a differential privacy perspective
Daniel Elazar, Australian Bureau of Statistics

Confidentiality and privacy in the dissemination of frequency tables
Natalie Shlomo, University of Manchester, UK

D1.09
2.00PM – 3.40 PM - Meeting Room 303

IPS-249: The Status of Statistics Education from Different Countries and Perspectives
Organiser: *Gail Burrill*
Chair: *Bruno De Sousa*
Discussant: *Joachim Engel*

Statistics education in Slovenia: Where we are and where we go
Andrej Blejec, University of Ljubljana, Slovenia

The evolving role of statistics as a domain of study in the United States
Gail Burrill, Michigan State University, USA

A discussion about the teaching of statistics at all levels in an Argentine province
Teresita Evelina Terán, National University of Rosario, Argentina

D1.11
2.00PM – 3.40 PM - Meeting Room 305

IPS-261: Recent Advances in Computationally-Intensive Bayesian Techniques for Analyzing Biomedical Data
Organiser: *Dipankar Bandyopadhyay*
Chair: *Hernando Ombao*

Bayesian nonparametric estimation for dynamic treatment regimes
Yanxun Xu, Johns Hopkins University, USA

Semiparametric Bayesian regression for skewed multivariate and tensor data
Debajyoti Sinha, Florida State University, USA

A Bayesian semiparametric mixture modeling of spatially-dependent positive definite matrices in diffusion tensor imaging
Dipankar Bandyopadhyay, Virginia Commonwealth University, USA

Bayesian sparse multivariate regression with asymmetric nonlocal priors for microbiome data analysis
Juhee Lee, University of California, USA

D1.12
2.00PM – 3.40 PM - Meeting Room 306

IPS-193: Data Integration in The Production of Official Statistics: Progress, Opportunity and Challenges
Organiser & Chair: *Barbara R Rater*
Discussants: *Michael Steiner, Pieter Everaers*

Integrating all data to produce official statistics: Progress report from the USDA's national agricultural statistics service
Linda J Young, US Department of Agriculture's National Agricultural Statistics Service, USA

A case study of Data Integration in Australia
Marcel Van Kints, Australian Bureau of Statistics

D1.13
2.00PM – 3.40 PM - Room 401

IPS-271: Use of New Technologies for the 2020 Population and Housing Census Round
Organiser & Chair: *Jean Michel Durr*

Egypt Census 2017
Shaker El-Naggar, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

Information technologies in next Population and Housing census in Mexico
Edgar Vielma Orozco, National Institute of Statistics and Geography (INEGI), Mexico

Conducting 2020 smart census using GIS and artificial intelligence
Donghun Suh, Statistics Korea

Computer-assisted personal interviewing as a census data processing solution in Africa: Observed opportunities and challenges
Oliver P. Fischer, United States Census Bureau

D1.14
2.00PM – 3.40 PM - Meeting Room 402

IPS-285: Pre-Release Access to Official Statistics: Does it Conflict with Independence and Impartiality?
Organiser: *Andreas Vasilios Georgiou*
Chair: *Hallgrimur Snorrason*
Discussant: *Dennis Trewin*

Prelease access to official statistics is not consistent with professional ethics
Andreas Vasilios Georgiou, Amherst College, USA

Pre-release and embargo – No, they don't exist
Marjo-Riitta Sylvia Bruun, Statistics Finland

Pre-release access to official statistics: The difference between privileged access to government and the media
Giorgio Alleva, Italian National Institute of Statistics (ISTAT), Italy

Tyranny hurts measurement
Pali Jobo Lehohla, Statistics South Africa

D1.16
2.00PM – 3.40 PM - Meeting Room 404

IPS-228: Segmentation, Clustering, and Optimal Subset Selection for Complex Data
Organiser: *Xinwei Deng*
Chair: *Ying Lu*
Discussant: *Pei Lee Teh*

A simple approach for complex data using spline-based multilevel model
Youngdeok Hwang, Sungkyunkwan University, Korea

Adaptive convex clustering of generalized linear models with application in purchase likelihood prediction
Huijing Jiang, IBM Thomas J. Watson Research Center, USA

D1.17
2.00PM – 3.40 PM - Meeting Room 405

IPS-24: Time Series Analysis and its Computational Challenges in Business and Industry
Organiser: *Paulo Canas Rodrigues*
Chair: *Patrick Groenen*
Discussant: *Ivor Cribben*

Recent advances in singular spectrum analysis
Paulo Canas Rodrigues, Federal University of Bahia, Brazil

Pattern recognition of interval time series
Elizabeth Ann Maharaj, Monash University, Australia

Online monitoring of durations in high frequency time series
Nalini Ravishanker, University of Connecticut, USA

D1.18
2.00PM – 3.40 PM - Meeting Room 406

STS-555: Recent Non-Parametric Approaches: Applications to Environnementales, Hydrological, Oceanological and Economic Data Analyses
Organiser & Chair: *Sophie Dabo-Niang*

Robust estimators for some Piecewise-Deterministic Markov Processes
Patrice Bertail, University of Nanterre, France

Generalized partially linear spatial probit models and applications
Sophie Dabo-Niang, University of Lille, France

How hard is it to detect abrupt changes in the statistics of time series?
Ronald van Nooijen, Delft University of Technology, Netherlands

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D1.19
2.00PM – 3.40 PM - Meeting Room 407

STS-543: Measuring the Impact of Policies with Credit Registry Data
Organiser & Chair: *Karen Lee*
Discussant: *Jean-Marc Israel*

The new Portuguese central credit register: A powerful tool for a central bank
Luis Teles Dias, Banco de Portugal

Have domestic prudential policies been effective: Insights from bank-level property loan data
Veronica Batallones Bayangos, Central Bank of the Philippines

Effectiveness of policies to address household indebtedness: Evidence from credit registry data in Malaysia
Muhammad Khairul Muizz Abd Aziz, Bank Negara Malaysia

D1.20
2.00PM – 3.40 PM - Meeting Room 408

STS-451: A Comprehensive Statistical Analysis on A Large-Scaled Scientific Citation Database - Web of Science
Organiser & Chair: *Frederick Kin Hing Phoa*

Clustering of research subject based on stochastic block model
Mio Takei, Institute of Statistical Mathematics, Japan

A two-step modern approach for quantifying the relationship among different subjects in the web of science database
Frederick Kin Hing Phoa, Academia Sinica, Chinese Taipei

Quantitatively analyze the capability of the organization: Estimating the capability to induce innovation based on co-author information of articles
Yuji Mizukami, Nihon University, Japan

An empirical and a data-driven analyses on the scientific article citation network
Junji Nakano, Chuo University, Japan

D1.21
2.00PM – 3.40 PM - Meeting Room 409

STS-422: Innovative Approaches in Measuring Financial Inclusion
Organiser: *Zarina Abd Rahman*
Chair & Discussant: *Luis Trevino*

Innovative approaches in measuring financial inclusion - Linking survey and administrative data
Damola Owolade, Insight 2 Impact, South Africa

Using big data to advance women's financial inclusion: Examining customer journeys at financial institutions in Cambodia
Robin Gravesteijin, United Nations Capital Development Fund (UNCDF), USA

State of financial inclusion in Malaysia
Zarina Abd Rahman, Bank Negara Malaysia

D1.22
2.00PM – 3.40 PM - Meeting Room 410

STS-535: Joint Modeling of Time-To-Events and Longitudinal Markers with Relevance to Personalized Interventions
Organiser & Chair: *Edsel Aldea Pena*

Personalized treatment selection for joint optimization of survival and other outcomes
Somnath Datta, University of Florida, USA

A Bayesian joint model under competing risks
Ananda Sen, University of Michigan, USA

Joint modeling of correlated longitudinal measures and a time-to-event outcome with limited failure
Sanjib Basu, University of Illinois, USA

Joint modeling of competing recurrent events, longitudinal marker, and a terminal event
Edsel Aldea Pena, University of South Carolina, USA

E1.00
4.00PM – 5.40 PM - Plenary Hall

STS-567: Effective Communication: What Every Young Statistician Should Know
Organiser: *Tamanna Howlader*
Chair: *Jane L Hutton*

Working with journalists to discuss and report statistical work
John Bailer, Miami University, USA

The art of communication - Know thine audience!
Louise M Ryan, University of Technology Sydney, Australia

What can social media do for academic and professional statisticians?
Emi Tanaka, The University of Sydney, Australia

E1.01
4.00PM – 5.40 PM - Ballroom 2

STS-423: Modernisation of Agricultural Statistics
Organiser: Johan Selenius
Chair: *Eduardo Barredo-Capelot*

New tools for data collection in Swedish surveys on use of fertilisers and animal manure and cultivation measures in agriculture
Ylva Andrist Rangel, Statistics Sweden

The role of Eurostat in modernizing agricultural statistics
Christine Wirtz, Eurostat, Luxembourg

Geospatial tools for acreage estimation and disaster assessment
Linda J Young, National Agricultural Statistics Service, USA

E1.02
4.00PM – 5.40 PM - Banquet Hall

STS-461: Nordic Experiences in Coordination of Global SDG Indicator Compilation and Establishing Database Reporting Platforms
Organiser: *Jukka Hoffrén*
Chair: *Heli Leena Marjatta Mikkelä*

Collaboration on SDG-Data between national stakeholder groups
Maciej Truszczynski, Statistics Denmark

The development of national reporting platform for global SDG indicators in Finland
Jukka Hoffrén, Statistics Finland

Coordinated communication for better follow-up of the 2030 agenda in Sweden
Karin Alicia Olovsdotter Hansson, Statistic Sweden

E1.03
4.00PM – 5.40 PM - Conference Hall 1

STS-563: Producing Population Estimates from Administrative Data Sources – How to Deal with Under- and Over-Coverage Error
Organiser: *Tracey Savage*
Chair: *James J Brown*
Discussant: *Li-Chun Zhang*

Population coverage survey sampling in the new Italian register based census
Piero Demetrio Falorsi, ISTAT, Italy

Developing an integrated survey for admin based population estimates and labour market statistics
Peter Jones, Office for National Statistics, UK

Recent progress on implementing a bayesian approach to population estimation from an administrative list subject to under and over-coverage
Shaodan (Anna) Lin, Stats NZ

Population size estimation from incomplete multisource lists: A Bayesian perspective on latent class modelling
Davide Di Cecca, ISTAT, Italy

E1.04
4.00PM – 5.40 PM - Conference Hall 2

STS-498: Supervised and Unsupervised Learning for Modern Data Sets
Organiser: *Tsung Fei Khang*
Chair: *Choung Min Ng*
Discussants: *Seng Huat Ong, Tsung Fei Khang*

The GUIDE Approach
Wei-Yin Loh, University of Wisconsin-Madison, USA

Influential Features PCA for High Dimensional Clustering Problem
Wanjie Wang, National University of Singapore

E1.05
4.00PM – 5.40 PM - Conference Hall 3

STS-505: Practical Applications of Robust Methods for Modelling and Analyzing Environmental- Related Data Having Outliers
Organiser: *Habshah Midi*
Chair: *Sohel Rana*

Statistical modeling of atmospheric gas consumption using robust methods
Hossein Riazosham, Lamerd Islamic Azad University, Iran

Analysing air quality data in an industrial area in Malaysia using several robust methods
Habshah Midi, Universiti Putra Malaysia

An application of Partial Robust-M Regression (PRM) based methods in predicting surface Ozone (O3) concentration levels
Mazni Mohamad, Universiti Teknologi MARA, Malaysia

An improvisation of weighted Bianco and Yohai estimator for analyzing environmental data having high leverage influential observations
Syaiba Balqish Ariffin, Universiti Putra Malaysia

E1.06
4.00PM – 5.40 PM - Plenary Theatre Auditorium

STS-633: Statistical Methods for Variable-Group Selection in High Dimensional Regression
Organiser & Chair: *Anang Kurnia*

Active effects selection with considering heredity principle in Multi-Factor experiment data analysis
Bagus Sartono, Bogor Agricultural University, Indonesia

Sparse-smoothed method for variable selection in high dimensional data analysis
Arief Gusnanto, University of Leeds, UK

Powerful differential expression analysis incorporating network topology for next generation sequencing data
Agus Salim, La Trobe University & Baker Institute for Heart and Diabetes, Australia

E1.07
4.00PM – 5.40 PM - Meeting Room 301

STS-442: Creating Comprehensive Data Worlds Through Formal Standardisation and Semantic Harmonization
Organiser: *Bruno Tissot*
Chair: *Olowofeso Olorunsola Emmanuel*

Measuring the data universe: The challenges of data integration in a time of exploding data worlds, successful approaches using Statistical standards, Bundesbank's experience
Patricia M Staab, Deutsche Bundesbank, Germany

Creating integrated data world within the Bank of Russia
Ekaterina Prokunina, Central Bank of the Russian Federation

Building a standardized taxonomy between financial reporting and macroeconomic statistics – A South African perspective
Lisa de Beer, South African Reserve Bank

Heading for harmonization of data collection
Arjan Bos, Netherlands Bank

Developing and using historical monetary and financial statistics
Boris Hofmann, Bank for International Settlements, Switzerland

E1.08
4.00PM – 5.40 PM - Meeting Room 302

STS-577: Recent Advances in Statistics and Computation
Organiser & Chair: *Nor Aishah Hamzah*

Improved robust rank-based test statistic in high-dimensional regression model
Mahdi Roozbeh, Semnan University, Iran

Joint modelling of longitudinal 3MS scores and survival for cognitively impaired individual
Noor Akma Ibrahim, Universiti Putra Malaysia

Perfection of volatility prediction with time scale information using wavelet transformation
Md. Sabiruzzaman, Rajshahi University, Bangladesh

A role of statistical models in the era of artificial intelligence
K.M Sakthivel, Bharathiar University, India

E1.09
4.00PM – 5.40 PM - Meeting Room 303

STS-592: Recent Issues in Actuary and Economics
Organiser: *Mohd Azmi Haron*
Chair: *Koh You Beng*

Insolvency risk models and capital adequacy rules for banking system
Mohd Azmi Haron, University of Malaya, Malaysia

On the growth and competitive effects of constant market share analysis
Micheal Yap Heck Wei, Maybank Malaysia

Measurement and modeling of moral hazard on equity contracts in investment financing
Aishanuddin AJ, Universiti Teknologi MARA, Malaysia

Volatility Modelling Using Range-Based Measures and Weighted Exogenous Threshold CARR Model
Ng Kok Haur, University of Malaya, Malaysia

E1.10
4.00PM – 5.40 PM - Meeting Room 304

STS-560: Advancing to the Next Stage of Talent Analytics Using Psychometric Assessments
Organiser: *Mazlina Muhamad*
Chair: *Mohamad Faeez Mohamad Ali*
Discussant: *Rense Lange*

Cross-validation of a potential model and development of a people analytics assessment solution
Rainer Hermann Kurz, Cubiks Group Limited (UK)

Using covert response biases in psychometric assessments for improved job candidate interviews: An example with hospitality roles
Haniza Yon, Malaysian Psychometrics Association

Exploratory study of key traits for the fourth industrial revolution among employees of financial institutions in Malaysia
Kok Mun Yee, Global Psytech Sdn. Bhd., Malaysia

E1.11
4.00PM – 5.40 PM - Meeting Room 305

STS-384: Improving Statistical Literacy in a Digital Age: Challenges for Developing Countries
Organiser & Chair: *Stephen Macfeely*

The elephant in the cloud
Pali Jobo Lehohla, University of Johannesburg, South Africa

Statistical literacy in the digital age in Argentina
Teresita Evelina Terán, National University of Rosario, Argentina

E1.12
4.00PM – 5.40 PM - Meeting Room 306

STS-517: Classical and Nonclassical Infinite Divisibility, Their Analysis and Applications: Part 1
Organiser & Chair: *Victor Perez Abreu*

Functional approximation of infinitely divisible processes with applications
Andreas Basse-O`Connor, Aarhus University, Denmark

Extrema of long range dependent infinitely divisible random fields
Genndady Samorodnitsky, Cornell University, USA

Infinitely divisible processes their random translations
Jan Rosinski, University of Tennessee Knoxville, USA

E1.13
4.00PM – 5.40 PM - Meeting Room 401

STS-420: Leveraging on Data to Improve Payment Products and Services
Organiser: *Jayson Poon*
Chair: *Yip Kah Kit*
Discussants: *Kenneth Lim, Azleena Idris*

Age of person credit score
Klyment Wong, WeChat Pay Malaysia Sdn. Bhd.

Leveraging on Data & Analytics to improve the adoption of e-wallet and financial services
Adrian Burton, Axiata Digital Services, Malaysia

E1.14
4.00PM – 5.40 PM - Meeting Room 402

STS-578: Advances in Statistics and Machine Learning for Finance
Organiser: *Bruno Dupire*
Chair: *Arun Verma*
Discussant: *Alexandre Alesi*

Machine learning for finance
Bruno Dupire, Bloomberg L.P., USA

Quantamental models for investing
Arun Verma, Bloomberg L.P., USA

Correlations in asynchronous markets
Aakriti Mittal, Bloomberg L.P., USA

E1.15
4.00PM – 5.40 PM - Meeting Room 403

STS-456: National Transfer Accounts as a Tool to Measure the Impact of Demographics Changes
Organiser: *Ezatul Nisha Abdul Rahman*
Chair: *Tengku Aizan Tengku Abdul Hamid*
Discussant: *Norma Mansor*

Demographics changes in Malaysia: Impact on shrinkage of working age population
Ezatul Nisha Abdul Rahman, Department of Statistics Malaysia

Socio-economic Satisfaction of Orang Asli in Structured Resettlement Programmes within the Parliamentary Constituency of Cameron Highlands
Devamany S. Krishnasamy, Malaysia

E1.16
4.00PM – 5.40 PM - Meeting Room 404

CPS-45: Various Statistical Application
Chair: *Lim Fong Peng*

CPS1406: Clustering planar shapes combined with multidimensional scaling
Mousa Golalizadeh, Tarbiat Modares University, Iran

CPS1954: Multiclass classification of growth curves using random change point model with heterogeneity in the random effects
Vincent Chin, University of New South Wales, Australia

CPS2149: A method to estimate the boundaries of urban agglomerations at the global level
Ana Moreno Monroy, Organisation for Economic Co-operation and Development (OECD), France

E1.17
4.00PM – 5.40 PM - Meeting Room 405

CPS-01: Social
Chair: *Siti Asiah Ahmad*

CPS1254: The measurement of inequality of opportunity in China
Yu Jin, Dongbei University of Finance and Economics, China

CPS1284: Refugees in labor market: Do they act as a marginalisation tool? A decomposition of the wage gap in Palestine
Rabeh Mahmoud Morrar, An-Najah National University, State of Palestine

CPS1322: Proportion of population with access to electricity (Developing countries example: Cameroon)
Ze Tolo Mark Antony, Ministry of Economy, Planning and Regional Development, Cameroon

CPS1373: Evidence based indicators for local educational monitoring - detective work for the district Berlin-Mitte
Ulrike Christa Dr. Rockmann, Institute for School Quality Berlin-Brandenburg E.V., Germany

CPS1452: Youth status in Egyptian labor market
Said Ahmed Said Soliman, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS2152: Dead or alive: Measuring the economic contribution of volunteer work in the Philippines
Christopher M. Reyes, Jesuit Volunteers Philippines Foundation

E1.18
4.00PM – 5.40 PM - Meeting Room 406

CPS-02: Official Statistics: Innovation and Modernization
Chair: *Riyanti Saari*

CPS1381: Comparing record linkage methods for data integration on Brazilian agriculture
Andrea Diniz da Silva, National School of Statistical Science Brazil

CPS1445: Innovation and use of data sources statistics on international migration in Morocco
Jamal Ait Mouha, High Commission for Planning, Morocco

CPS1931: Every Policy Is Connected (EPIC): A generic tool for policy-data integration
Arman Bidarbakhtnia, United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), Thailand

CPS2198: Modernizing official statistics in Egypt: The approach to apply open data
Ayman Hathoot Hathoot, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS2249: Microdata dissemination at DOSM : Challenges, potential and implementation
Azrin Ahmad, Department of Statistics Malaysia

E1.19
4.00PM – 5.40 PM - Meeting Room 407

CPS-31: Statistical Modelling
Chair: *Suraya Ismail*

CPS1290: Probit model of decent living house ownership determinants in DKI Jakarta province 2017
Sahda Ratnasari Sutikno, Badan Pusat Statistik, Indonesia

CPS1304: Modeling seasonal epidemic data using Integer Autoregressive Model
Manik Shankar Awale, Savitribai Phule Pune University, India

CPS1889: Time series forecasting model by singular spectrum analysis and neural network
Subanar Senosaleh, Gadjah Mada University, Indonesia

CPS2025: mpcmp: Mean-Parametrized Conway-Maxwell Poisson (Com-Poisson) regression
Thomas Fung, Macquarie University Sydney, Australia

CPS2164: Analytical likelihood derivatives for state space forecasting models
Jonathan Hosking, Amazon.com, USA

CPS2166: Robust wavelength selection using input scaling of Filter-Wrapper methods on near infrared spectral data of oil palm fruit mesocarp
Divo Dharma Silalahi, SMART Research Institute, Riau, Indonesia

E1.20
4.00PM – 5.40 PM - Meeting Room 408

CPS-17: Statistical Finance
Chair: *Chuah Kue Peng*

CPS1185: Flexible models for stock returns based on student's t distribution
Emmanuel Osita Afuecheta, Nnamdi Azikiwe University, Nigeria

CPS1822: On robust index tracking
Spiridon Ivanov Penev, the University of New South Wales, Australia

CPS1947: Semi-parametric single-index predictive regression
Hsein Kew, Monash University, Australia

CPS1968: Forecasting Naira-USD exchange rate using Bayesian regularized neural network
Ridwan Oyebayo Olaniran, Universiti Tun Hussein Onn, Malaysia

CPS2061: An investigation into parametric and non-parametric modelling of LGD to estimate extreme percentiles of the loss distribution with respect to defaulted loans
Janette Larney, North-West University, South Africa

CPS2444: How resilient is Indian banking system? – IBS perspective
Avijit Joarder, Reserve Bank of India (RBI)

E1.21
4.00PM – 5.40 PM - Meeting Room 409

CPS-27: Official Statistics: Quality
Chair: *Zainol Jamil*

CPS1427: International trade database as a tool to improve the quality of statistics between trading partners
Mostafa Mahmoud Abdelnaby Esmail, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS1978: Ensuring the quality of data: no accessibility to raw data
Sri Astuti Thamrin, Hasanuddin University, Indonesia

CPS1982: Traditional and newly emerging data quality problems in countries with functioning Vital Statistics: Experience of the Human Mortality Database
Dmitri Jdanov, Max Planck Institute for Demographic Research (MPIDR), Germany

CPS1983: Data analytics for better statistics
Ning Chong, Ministry of Manpower, Singapore

CPS1984: Integrating clustering and classification into statistical data-quality-management
Stefan Mario Thum, Deutsche Bundesbank, Germany

CPS1985: Trusted official smart statistics - challenges for official statistics in using data sources coming from private data producers
Markus Zwick, Federal Statistical Office of Germany

E1.22
4.00PM – 5.40 PM - Meeting Room 410

CPS-37: Applications of Statistics: Business and Economics
Chair: *Assis Kamu*

CPS658: The impact of mis-specification of the deterministic components in the Co-integration model: An application to the bivariate case on South African employment costs and gross earnings
Sagaren Pillay, Statistics South Africa

CPS2145: Asymmetry of International Trade Statistics: A focus on Sarawak's Liquefied Natural Gas (LNG) trade with Japan
Roslawati Yahya, Department of Statistics Malaysia

CPS2134: A multi-factor modelling for retail demand forecasting: An empirical analysis of restaurant visitors prediction
Yutaka Kuroki, Tokyo University of Science, Japan

CPS1438: The construction of sharing economy indicator system and the empirical analysis of sharing economy's impact on total factor productivity in China
Meihui Zhang, Dongbei University of Finance and Economics, China

CPS2160: Economic determinants of import demand for rubber latex products: An econometric analysis for top 4 rubber consuming countries
Aye Aye Khin, Universiti Tunku Abdul Rahman, Malaysia

CPS2258: Health tourism in Malaysia: Does this industry provide a catalyst for economic growth?
Siti Norfadillah Md Saat, Department of Statistics Malaysia

20th August 2019 (Tuesday)

Updated as at 17th August 2019

A2.01
8.50 AM – 10.00 AM - Ballroom 2

SIPS-167: IASS President's Invited Session
Organiser: *Risto Lehtonen*
Chair: *Peter Lynn*

A thing of the past? Household surveys in the new global data ecosystem
Gero Carletto, World Bank, USA

A2.02
8.50 AM – 10.00 AM - Banquet Hall

SIPS-251: IASE President's Invited Session: Data Science and Statistical Education
Organiser & Chair: *Gail Burrill*

The seven deadly sins of data science
Richard Deveaux, Williams College, UK

A2.03
8.50 AM – 10.00 AM - Conference Hall 1

SIPS-358: IAOS President Lecture: Walking Through Previously Uncharted Territories: Governance, Crime and Drug Statistics
Organiser & Chair: *Mario Palma*
Discussant: *Nancy McBeth*

Peace, justice and strong institutions. Walking through Asian and pacific territories
Gemma Van Halderen, United Nations Economic Commission for Asia and the Pacific (UN ESCAP), USA

The challenge of preserving direct citizen participation in the definition of the crime problem: The future of victimization surveys
James Lynch, University of Maryland, USA

A2.04
8.50 AM – 10.00 AM - Conference Hall 2

SIPS-365: International Statistical Review Journal Lecture
Organiser: *Nalini Ravishanker*
Chair: *Ray Chambers*
Discussants: *Scott H Holan*, *James Brown*

Recent developments in dealing with item nonresponse in surveys: A critical review
David Haziza, University of Montreal, Canada

A2.05
8.50 AM – 10.00 AM - Conference Hall 3

SIPS-367: Statistical Societies Presidential Lectures 1
Organiser & Chair: *Helen MacGillivray*

International Biometric Society – A global network of stats nerds who love to solve problems in the biological sciences!
Louise M Ryan, University of Technology Sydney, Australia

The ASA and its Role in the Global Statistical Community: Lessons from the Past and a Look to the Future
Karen Kafadar, University of Virginia, USA

B2.01
10.30 AM – 12.30 PM - Ballroom 2

SIPS-373: International Society for Bayesian Analysis Invited Papers Session
Organiser: *Raquel Prado*
Chair: *Hedibert Lopes*

Bayesian Inference for Multiple Gaussian Graphical Models with Application to Metabolic Association Networks
Maria De Iorio, Yale-NUS College, Singapore

A Bayesian Approach for Estimating Dynamic Functional Network Connectivity in fMRI data
Michele Guindani, University of California Irvine, USA

Optimizing Natural Killer Cell Doses for Heterogeneous Cancer Patients Based on Multiple Event Times
Juhee Lee, University of California Santa Cruz, USA

B2.02
10.30 AM – 12.30 PM - Banquet Hall

SIPS-629: International Biometric Society Invited Papers Session
Organiser: *Alison Kelly*
Chair: *Ross Darnell*
Discussant: *Linda J Young*

Advanced methods of statistical analysis for multi-environment trial data enhanced genetic gain in the Ethiopian sorghum research breeding program
Yohannes Fekadu, Ethiopian Institute of Agricultural Research

Spatial sampling and geospatial information for monitoring agriculture and agri-environment
Elisabetta Carfagna, University of Bologna, Italy

Harnessing the next generation of agricultural machinery: Beyond the tractor
Petra Kuhnert, Commonwealth Scientific and Industrial Research Organisation (CSIRO), Australia

B2.03
10.30 AM – 12.30 PM - Conference Hall 1

IPS-97: Developing Leadership Skills in Women
Organiser: *Cathy Furlong*
Chair: *TBA*
Discussant: *Ola Awad*

Panellists
- *Cathy Furlong, Statistics without Borders, USA*
- *Denise Britz Do Nascimento Silva, National School of Statistical Sciences*
- *Mary W. Gray, American University, USA*
- *Denise Lievesley, University of Oxford, UK*
- *Janet Van Niekerk, KAUST / University of Pretoria, South Africa*
- *Diane Stukel, FHI 360, USA*
- *Cynthia Z. F. Clark, Council of Professional Associations on Federal Statistics, USA*

B2.04
10.30 AM – 12.30 PM - Conference Hall 2

IPS-124: Private Public Partnerships to Improve Capacity to Measure SDG's
Organiser: *Misha Belkindas*
Chair: *Gero Carletto*
Discussants: *Oliver Chinganya*, *Gabriella Vukovich*

Role of ISI, and statistical societies in measuring SDG's
Alexey N Ponomarenko, Russian Statistical Association

How statistical agencies can support bridging the data gap
Heli Mikkela, Statistics Finland

Common approaches to capacity development in response to agenda 2030
Hristina Aleksandrova, GOPA Consulting, Germany

B2.05
10.30 AM – 12.30 PM - Conference Hall 3

STS-509: Developing Successful Partnerships for Capacity-Building in Civil Registration and Vital Statistics to Meet the Needs of the SDGs
Organiser: *Stephan Krische*
Chair: *Tomas Africa*
Discussants: *Matthew Shearing, Gemma Van Halderen*

Panellists
- *Lisa Grace Bersales, University of the Philippines*
- *Nazaria Baharudin, Department of Statistics Malaysia*

- *Boupha Samaychanh, Head of Lao Statistics Bureau*

B2.06
10.30 AM – 12.30 PM - Plenary Theatre Auditorium

STS-2538: AirAsia 3.0 - More than just an airline
Organiser: *AirAsia Group*
Chair & Discussant: *Shasha Ridzam*

Engineering in AirAsia: How we use our data
Nadzri Hashim, Group Head of Engineering, AirAsia

Leveraging Data for Flight Operations in AirAsia
Chester Voo Chee Soon, Director of Flight Operations, AirAsia

AirAsia 3.0: Data and digital travel
Lye Kong Wei, Group Head of Data Science, AirAsia

Leveraging tech & data for enhancing employee engagement & productivity
Varun Bhatia, Chief People & Culture Officer, AirAsia

B2.07
10.30 AM – 12.30 PM - Meeting Room 301

IPS-77: Methods to Handle Large Environmental Data
Organiser: *Giovanna Jona Lasinio*
Chair: *Alessio Pollice*
Discussant: *Shuvo Bakar*

Bayesian modelling and inference for massive spatial-temporal data
Sudipto Banerjee, UCLA Fielding School of Public Health, USA

A fused Gaussian process for large spatial and spatio-temporal data and its applications
Emily Lei Kang, University of Cincinnati, USA

Modelling atmospheric phenomena at the global scale: A non-parametric framework
Fedele Pasquale Greco, University of Bologna, Italy

Block nearest neighboor Gaussian processes
Marcos Oliveira Prates, Universidade Federal de Minas Gerais, Brazil

B2.08
10.30 AM – 12.30 PM - Meeting Room 302

IPS-110: Administrative and Reporting Systems as Possible Sources of Agricultural Statistics for Monitoring SDGs in Developing Countries?
Organiser & Chair: *Naman Keita*
Discussant: *Flavio Pinto Bolliger*

Developing an administrative data system for agricultural statistics in the context of SDGs monitoring
Dramane Bako, Food and Agriculture Organisation (FAO), Italy

Building and maintaining a farm register based statistics to monitor and assess SDG's progress in Morocco
Redouane Arrach, Morrocco Ministry of Agriculture

Examining the quality of data from the Philippines' agricultural administrative reporting system
Dalisay Maligalig, ADB Retiree, Philippines

Use of administrative records to generate structural data as part of integrated system of agriculture census and follow up surveys: A case of India
Dalip Singh, Ministry of Agriculture and Farmers Welfare, India

B2.09
10.30 AM – 12.30 PM - Meeting Room 303

IPS-234: Big Data and Small Areas in Monitoring Sustainable Development Goals
Organiser: *Monica Pratesi*
Chair: *Luigi Biggeri*
Discussants: *Raymond Chambers, Eileen Capilit*

Alternative spatial data sources for small area estimation in developing countries
Angela Luna, University of Southampton, UK

Measuring well-being at local level using big data
Ralf Muennich, University of Trier, Germany

Small area poverty indicators adjusted using local price indexes
Stefano Marchetti, University of Pisa, Italy

State-space dynamic factor model for now casting unemployment
Jan Van Den Brakel, Statistics Netherlands

B2.10
10.30 AM – 12.30 PM - Meeting Room 304

IPS-142: New Methodologies for the 2020/2021 Round of Population and Housing Censuses
Organiser & Chair: *Eric Schulte Nordholt*
Discussant: *Paolo Valente*

Planned innovations in the United States 2020 Census
Robert Colosi, Census Bureau (United States)

New paradigm for population and housing census of Korea
Youngil Lim, Statistics Korea

Future operational plan summary for census in the Kingdom of Saudi Arabia
Fahad Altukife, General Authority for Statistics (Saudi Arabia)

Moving towards a register based census in Spain
Jorge Luis Vega Valle, Instituto Nacional de Estadística (Spain)

B2.11
10.30 AM – 12.30 PM - Meeting Room 305

IPS-169: Reducing Complexity - The Impacts and Methodology of Indicators and Scoreboards
Organiser & Chair: *Walter J. Radermacher*
Discussants: *Eleni Papadimitriou*, *Maurizio Vichi*

The multiple faces of trust in statistics and composite indicators: A case for healthy mistrust
Markku Lehtonen, Ecole Des Hautes Etudes En Sciences Sociales– Paris

Monitoring sustainable development in an EU context
Nicola Massarelli, Eurostat, Luxembourg

Fair and sustainable well-being indicators for European countries: Comparing different synthesizing approaches
Filomena Maggino, University of Rome, Sapienza, Italy

What are the risks and opportunities of SDGs composite indexes?
Francesca Perucci, United Nations Statistics Division (UNSD), USA

Of numbers and narratives: Data and evidence for policy-making in the 21st century
Gaby Umbach, European University Institute, Italy

B2.12
10.30 AM – 12.30 PM - Meeting Room 306

IPS-257: Recent Advances in Statistical Methods for Analyzing Brain Networks
Organiser: *Chee-Ming Ting*
Chair: *John Aston*
Discussant: *Hernando Ombao*

Non-stationary high dimensional time series networks for brain imaging data
Ivor Cribben, Alberta School of Business, Canada

Identifying State-driven changes in brain networks using regime-switching models
Chee-Ming Ting, Universiti Teknologi Malaysia

A geometric approach towards evaluating FMRI preprocessing pipelines
Martin A Lindquist, Johns Hopkins University, USA

Topological data analysis for brain networks
Nicole A. Lazar, University of Georgia, USA

B2.13
10.30 AM – 12.30 PM - Meeting Room 401

IPS-290: The Educational Impact of Statistical Collaboration Laboratories on Students
Organiser & Chair: *Eric Vance*

The complementary role of UI-LISA in statistical training and capacity building at the University of Ibadan, Nigeria
Olusanya Elisa Olubusoye, University of Ibadan, Nigeria

Effects of participation in a statistical laboratory on statistics students
Marcus Nunes, UFRN, Natal, Brazil

Recent advances and impacts of statistical consulting and collaboration laboratories in Nigeria
Olawale Awe, Anchor University Laboratory for Interdisciplinary Statistical Science and Data Analysis, Nigeria

Educational impact of statistical collaboration laboratory on students
HaftomTemesgen, Mekelle University, Ethiopia

B2.14
10.30 AM – 12.30 PM - Meeting Room 402

IPS-287: Risk and Probability Literacy
Organiser: *Manfred Borovnick*
Chair: *David Stern*
Discussant: *Ayse Aysin Bombaci Bilgin*

The twin character of risk and probability
Manfred Borovnick, University of Klagenfurt, Austria

Probabilistic reasoning, superstitious thinking and gambling behavior in children and adolescents
Caterina Primi, University of Florence, Italy

Intellectual humility as the key to improve the interpretation of statistics
Rink Hoekstra, University of Groningen, Netherlands

B2.15
10.30 AM – 12.30 PM - Meeting Room 403

IPS-320: From Status in Employment to Work Relationships:
Organiser: *Michael Thye Frosch*
Chair: *Tite Habiyakare*
Discussant: *Françoise Carré*

The resolution concerning statistics on work relationship and how it can be measured
Michael Thye Frosch, International Labour Organization, Thailand

Thailand 2017 LFS - Highlights of findings from testing of dependent contractors
Wissanee Poonsab, Statistical Office of Thailand

Entrepreneurs, Multiparty work relationships and work in the internet-based "Gig Economy": How to advance on statistical measurement?
Monica Dianne Castillo, International Labour Organization, Thailand

Testing dependent contractors in the Danish labour force survey
Thomas Thorsen, Statistics Denmark, Copenhagen

B2.16
10.30 AM – 12.30 PM - Meeting Room 404

IPS-215: Recent Development on Methods in Teaching and Learning in Statistics
Organiser: *Zamalia Mahmud*
Chair: *Mohd Bakri Adam*

STATLEARN@: An E-learning tool for assisting students' understanding of hypothesis testing
Zamalia Mahmud, Universiti Teknologi MARA, Malaysia

Data skills in schools: The statistics award
David Young, University of Strathclyde, UK

Differences in perceptions towards stem of male and female students in Australia
Elizabeth Stojanovski, University of Newcastle, Australia

Optimal use of statistical softwares for insight and simulation in teaching and learning statistics: Comparison of Indonesia and Saudi Arabia
Maman Fathurrohman, University of Untirta, Serang City, Indonesia

B2.17
10.30 AM – 12.30 PM - Meeting Room 405

IPS-79: Use of Unconventional Big Data for Official Statistics: Some Current Cases
Organiser: *Anders J S Holmberg*
Chair: *Arnoldo Frigessi*
Discussant: *Partha Lahiri*

Big Data and macroeconomic nowcasting: From data access to modelling
Eduardo Barredo Capelot, Eurostat, Luxembourg

Replacing a survey question by predictive modelling using register data
Joep Burger, Organisation Statistics Netherlands

Big Data, sample surveys and finite population inferences
Siu-Ming Tam, Australian Bureau of Statistics

Disaggregation of expenditure weights based on transaction data
Li-Chun Zhang, Statistics Norway

Data science for public good - Case studies from the United Kingdom
Chaitanya Joshi, Data Science Campus, Office for National Statistics, UK

B2.18
10.30 AM – 12.30 PM - Meeting Room 406

IPS-173: Consistent Measurement of Multinational Enterprise (MNE) Activities in Economic Statistics
Organiser: *Bruno Tissot*
Chair: *Robert Kirchner*
Discussant: *Peter van de Ven*

Characteristics of MNES in Canada
Alexandre Fortier-Labonté, Statistics Canada

Complex multinational enterprises in statistics: The cooperative approach between Bundesbank and Banque de France
Jens Walter, Deutsche Bundesbank, Germany

Tracking multinationals' activities in the shipping industry: A new statitistical framework for the estimation of sea transport services in the Greek balance of payments
Marios Papaspyrou, Bank of Greece

Recent Improvements of the Tankan Business Survey: Globalization of Business and Statistical Revisions
Yuki Uchida, Bank of Japan

B2.19
10.30 AM – 12.30 PM - Meeting Room 407

STS-459: Statistical Methods and Applications
Organiser & Chair: *Bee Wah Yap*
Discussant: *Nurulkamal Masseran*

Adaptive control chart with run rules for multivariate coefficient of variation integrating advanced data visualization platform for sustainable manufacturing
Xinying Chew, Universiti Sains Malaysia

The effects of macroeconomic variables on future credit ratings
Chew Peng Gan, Sunway University, Malaysia

Statistical model for count data and its extension of panel count
Wan Fairos Wan Yaacob, Universiti Teknologi MARA, Malaysia

Probability Distribution Model for Predicting Ozone (O_3) Exceedances at Two Air Quality Monitoring Sites in Malaysia during Dry Season
Norshahida Shaadan, Universiti Teknologi MARA, Malaysia

B2.20
10.30 AM – 12.30 PM - Meeting Room 408

STS-550: Nowcasting and Forecasting of Macroeconomic Variables: Model Averaging and Similar Techniques
Organiser: *Kyle Hood*
Chair: *Baoline Chen*

Markov-Switching three-pass regression filter
Danilo Leiva-Leon, Bank of Spain

Forecasting household consumption components: A forecast combination approach
Katherine Tuck, Treasury Department, Australia

Nowcasting Finnish real economic activity: A machine learning approach
Paolo Fornaro, The Research Institute of the Finnish Economy

Bayesian Midas penalized regressions: Estimation, selection, and prediction
Matteo Mogliani, Bank of France

Combination nowcasts of advance estimates of private consumption of services in the U.S. national accounts
Kyle Hood, U.S. Bureau of Economic Analysis

B2.21
10.30 AM – 12.30 PM - Meeting Room 409

STS-506: Bayesian Modelling of Public Health Data in the Presence of Spatial or Temporal Dependence
Organiser: *Marta Blangiardo*
Chair: *Sujit Kumar Sahu*
Discussant: *Gianluca Baio*

On the use of surrogate models to speed the ABC inference for epidemic models in networks
Leticia L. Ramirez Ramirez, CIMAT, Guanajuato, Mexico

Assessing the acute health effects of apportioned pollutant mixtures
Monica Pirani, Imperial College London, UK

Discrete versus continuous domain models for disease mapping and applications on childhood cancers
Garyfallos Konstantinoudis, University of Bern, Switzerland

Air quality, mortality, and the Indian million deaths study
Patrick Brown, University of Toronto, Canada

B2.22
10.30 AM – 12.30 PM - Meeting Room 410

STS-1080: Data Science and Healthcare Informatics for the Developing Countries Special Session
Organiser: *Mohsen Farid*
Chair: *TBA*

Data science and the Big Data framework for development and to benefit from disruptive technology advances
Fionn Murtagh, University of Hudders Field, UK

How can Big Data analytics predict psychiatric morbidity of cancer patients?
Mohsen Farid, University of Derby, UK

Analysis of Blockchain for Healthcare Applications
Mohsen Farid, University of Derby, UK

Diet4you: A personal intelligent assistant for diets integrating data science
Karina Gibert, Bea Sevilla-Villanueva, Miquel Sànchez-Marrè, Spain

A survey of machine learning algorithms for efficient biomarkers identification from erythrocytes dynamic antigens store
Passant El-Kafrawy, Menofia University, Egypt

CE2.01
12.30 PM – 1.10 PM - Foyer Level 3 (East)

CPS1499-01: Australian labour account: A new holistic view of people and jobs
Hayley Alison Collett, Australian Bureau of Statistics

CPS1396-02: Information and communication technology satellite account exercise - Opportunities and risk from alternative methods
Ayah Fateen Alhajjar, Palestinian Central Bureau of Statistics, State of Palestine

CPS2391-03: Comparison of the charts based on overlapping and nonoverlapping subgroup observations
Jimoh Olawale Ajadi, City University of Hong Kong

CPS1826-04: A study on the relationship between life cycle of enterprises and affecting variables in Korea
Younyoung Park, Statistics Korea

CPS1397-05: Use of national account data in international comparisons of indicators dynamics and structure GDP (at the production stage)
Ruslan Motoryn, Kyiv National University of Trade and Economics, Ukraine

CPS1909-06: Evaluating South Africa's market risk using APARCH model under Heavy-Tailed distributions
Retius Chifurira, University of Kwazulu-Natal, South Africa

CPS1913-07: Development of agricultural and rural statistics in the CIS region
Andrey Kosarev, CIS Statistical Committee, Russian Federation

CPS1837-08: CSI300 volatility forecasting model and its MCS test
Qiguang Dong, PLA Military Science Academy, China

CPS1907-09: Handling technological changes by time varying coefficient model analysis in flash estimate of gross value added in information and communication industry
Ildikó Ritzlné Kazimir, Hungarian Central Statistical Office

CPS1908-10: Employment of domestic concept in the framework of process table
Ildikó Ritzlné Kazimir, Hungarian Central Statistical Office

CPS1377-11: The poverty reduction through social-economic factors in Indonesia
Lita Jowanti, Badan Pusat Statistik, Indonesia

CPS1852-12: Birth order and birth weight in Uganda: A multilevel analysis of DHS data
Leonard Kiboijana Atuhaire, Makerere University, Uganda

CPS1904-13: Plutus – A new tool to standardise the metadata of seasonal adjustment
Mária Pécs, Hungarian Central Statistical Office

CPS1159-14: Evaluating heterogeneous forecasts for vintages of macroeconomic variables
Philip Hans Franses, Erasmus School of Economics

CPS1391-15: The need for a new conceptual statistical framework for Macr-Prudential purposes
Agnes Tardos, European Central Bank, Germany

CPS1360-16: The empirical study on the model of P2P loan default rate based on the Renrendai's
Wenbin - Huang, Fuzhou University, China

CW2.01
12.30 PM – 1.10 PM - Foyer Level 3 (West)

CPS1848-24: Global hypothesis test to compare the predictive values of two diagnostic tests subject to a case-control study
José Antonio Roldán-Nofuentes, Spain

CPS1421-25: Pension funds in Morocco: Reforms and challenges
Nisrine Ghefou, High Commission for Planning, Morocco

CPS1468-26: Estimators of Goodness-Of-Fit measures for a Poisson regression model
Takeshi Kurosawa, Tokyo University of Science, Japan

CPS1425-27: Modelling the demographic dividend and development prospects: A case of Uganda
Atwebembeire John Mushomi, Makerere University, Uganda

CPS1141-28: A new robust ridge estimator in high-dimensional linear models
Mahdi Roozbeh, Semnan University, Iran

CPS1839-29: Measuring the hidden economy and improving Moroccan GDP exhaustiveness through the labor matrix
Bahija Nali, High Commission for Planning, Morocco

CPS1463-30: Developing a four-level hierarchical linear model to examine competing effects of students, classrooms, teachers, and schools on science achievement
Xin Ma, University of Kentucky, USA

CPS1465-31: Using machine learning technologies for coding economic activities of businesses – The Nogauto system
Claude Macchi, Swiss Federal Statistical Office (FSO), Switzerland

CPS1435-32: A closer look at the national senior certificate mathematics examination in South Africa
Nombuso Zondo, University of Kwazulu-Natal, South Africa

CPS1439-33: Spatial-Economic analysis of health facilities and factors associated to the demand and offer of health care for tuberculosis patients in Douala, Cameroon
Nana-Yakam Andre, University of Douala, Cameroon

CPS1472-34: A new composite wellbeing index: (Egypt & Malaysia comparison study)
Mahmoud Mohamed Elsarawy, Egypt

CPS1459-35: An analysis of capital gains statistics over the 5 years with an aim to formulate a profile of taxpayers who have capital gains tax liability
Samantha Naicker, South African Revenue Service

CPS1847-36: Big data
Md Shariful Islam, Department of Cypher, Ministry of Defense, Ganobhaban Complex, Shere- Bangla Nagar, Dhaka, Bangladesh

CPS1835-37: Research on carbon emissions factors based on the EKC
Qiguang Dong, PLA Military Science Academy, China

CPS1418-38: Interval estimation for Symmetric and Asymmetric Exponential Power distribution parameters with application to psychiatric data
Akin Adeseye Olosunde, Obafemi Awolowo University, Nigeria

CPS1430-39: The extension of summary indices for assessing age-sex data
Hong Li, Fuzhou University, China

CE2.02
1.20 PM – 2.00 PM - Foyer Level 3 (East)

CPS1851-01: A method of bias correction when response rate follows linear function
Heeyoung Chung, Hankuk University of Foreign Studies, Korea, Republic of

CPS1500-02: Study on the construction of statistics governance system in China
Jue Liu, Hubei Bureau of Statistics of the People's Republic of China

CPS1810-03: Quantile Residual Life Regression based on semi-competing risks data
Jin-Jian Hsieh, Department of Mathematics, National Chung Cheng University, Chinese Taipei

CPS1850-04: Women's participation in Brazilian cinema over the last two decades: Evidences based on statistical analysis
Denise Britz Do Nascimento Silva, National School of Statistical Sciences – ENCE/IBGE, Brazil

CPS1829-06: Married women's experience of domestic violence: New evidence from a cluster and multinomial logistic regression analysis in Malawi
Lana Chikhungu, University of Portsmouth, UK

CPS1225-07: The method of measuring the quality of statistical output at BPS-Statistics Indonesia
Reni Amelia, Badan Pusat Statistik, Indonesia

CPS1227-08: Inference of Threshold Autoregressive (TAR) models with dependent errors
Mohamed Elmi, University of Djibouti, Djibouti

CPS1263-09: Determinants of intestinal parasites amongst pre-school aged children in the democratic republic of Congo: A Multilevel Analysis
Joseph Kandala, University of Kinshasa, Congo

CPS1231-10: A two parameter Pranav distribution with properties and its application
Edith Uzoma Umeh, Nnamdi Azikiwe University, Nigeria

CPS1841-11: Study on the impact of social distractor on data quality through multiple communication modes has been used as a new tools in data collection
Said Kamal Abdelrahman, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS1364-12: Automatic classification methods on the education data in the Gambia: Divergence measures and application to clustering)
Saidou Ms Badjie, Ministry of Petroleum And Energy, Gambia

CPS1363-13: General unsupervised learning from the Gabece data and rank correlation study
Ousman Saine, Ministry of Basic and Secondary Education, Gambia

CPS1378-14: Branchless banking in Nigeria: Concept, benefits, and challenges
Chioma Nwosu, Central Bank of Nigeria

CPS1279-15: Financial inclusion and stability: Do they matter for monetary policy?
Yaaba Baba Nmadu, Central Bank of Nigeria

CPS1330-16: Geostatistics: Subsurface geobody imaging
Sunjay Sunjay, Geophysicist, India

CPS1300-17: Identification of genomic markers correlated with sensitivity in solid tumors to dasatinib using sparse principal components
Ahmed Hossain, North South University, Bangladesh

CPS1186-18: Multivariate Jackknife Delete-5 Algorithm on the effect of Nigeria foreign trade on foreign exchange rates of Naira (1960-2010)
Happiness Onyebuchi Obiora-Ilouno, Nnamdi Azikiwe University, Nigeria

CW2.02
1.20 PM – 2.00 PM - Foyer Level 3 (West)

CPS1866-24: Multivariate approach to dimension reduction based on the Enhanced Scatter Search – Composite I-Distance Indicator (ESS-CIDI) approach: The Case of the Sustainable Socitey Index (SSI)
Milica Maricic, University of Belgrade, Serbia

CPS1867-25: On complex seasonal SSA based forecasting
Winita Sulandari, Gadjah Mada University, Indonesia

CPS1868-26: Fighting innumeracy with TV
Jo Roislien, University of Stavanger, Norway

CPS1870-27: A spatial rank-based EWMA chart for monitoring linear profiles
Longcheen Huwang, National Tsing Hua University, Chinese Taipei

CPS1483-28: Mobile phone use and incidence of brain tumour
Masoumeh - Sanagou, Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), Australia

CPS1881-29: Likelihood ratio tests for Lorenz dominance
Mike Chang, Institute of Statistic Science, Academia Sinica, Chinese Taipei

CPS1883-30: Flipping the online classroom in a multivariate data analysis course
Christina Andersson, Frankfurt University of Applied Sciences, Germany

CPS1484-31: Parametric bootstrap based test for detecting changes in marriage patterns
Neela A Gulanikar, Savitribai Phule Pune University, India

CPS1892-32: The survey and research of "Non-Observed Finance" -- Take Shenzhen as an example
Xinhong Yang, Statistics Bureau of Guangdong Province, China

CPS1902-33: The study on weighting adjustment in panel survey based on Chinese family panel studies
Ping Lu, Peking University, China

CPS1325-34: Producing and disseminating more and better agriculture data for SDGs in Egypt: Progress and challenges-IPS
Waleed Mohammed, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS1199-35: Derivation of Prior and Posterior distributions of regression parameters based on Zellner's g-Priors
Rotimi Kayode Ogundeji, University of Lagos, Nigeria

CPS1189-36: Stochastic analysis of a non-identical unit redundant system with priority to repair of original unit over repair activities of duplicate unit
Monika Saini, Manipal University Jaipur, India

CPS1172-37: A Generalized Regression estimation of the Item Sum technique in sensitive surveys
Temitope Olufunmilayo Alakija, Yaba College of Technology, Nigeria

CPS1321-38: Analytical comparison of product type HT estimators for negative adaptive cluster double sampling
Raosaheb Latpate, Savitribai Phule Pune University, India

CPS1323-39: Comparison of some techniques for testing multivariate normality: A simulation study
Mbanefo Solomon Madukaife, University of Nigeria

CPS1150-40: Information management in a developing country megacity: Importance of a statistical system in Lagos state, Nigeria
Ismaila Adedeji Adeleke, University of Lagos, Nigeria

CPS1912-41: Regularized multi linear dependence modelling on the grades in the Gambian GABECE data
Marrie Mendy, Ministry of Higher Education, Research, Science and Technology, Gambia

CPS1326-42: From whether to when: A study of student dropout in a management school
Lukman Abolaji Ajijola, University of Lagos, Nigeria

CPS1329-43: Poisson-Exponential-Tweedie regression models for Ultra-Overdispersed Count Data
Rahma Abid, University of Sfax, Tunisia

LTDG2.08
12.50 PM – 1.45 PM - Meeting Room 302

Artificial Intelligence (AI) in Medical
Chairs: *Alaba Lamidi-Sarumoh* & *Shuichi Shinmura*

Associations & Special Interest Groups:
International Association for Statistical Computing (IASC)

- What are some of the best software/algorithms in mining medical data?
- How do medical statisticians keep track of new algorithms and software that perform better than existing ones?
- For data mining in cancer gene analysis , what is the best approach: discriminant analysis of overlapping data or linear separation of high dimension data?

LTDG2.10
12.50 PM – 1.45 PM - Meeting Room 304

The Challenges and Partnerships of Official statistics in the Era of Big Data
Chairs: *Lastari Titi Kanti* & *Peter Osuolale Popoola*

Associations & Special Interest Groups:
International Association for Official Statistics (IAOS), Statistical Capacity Building

- What are the objectives of using big data in national statistical systems? What are the challenges?
- What evidence is driving your perceptions of trust, waste, and efficiency in the public and private sectors when considering the most effective and efficient ways to improve capacity in NSOs?
- What has been the real obstacles and solutions to initiating a public-private partnership for your statistical organization, if the will to do that has been there?

LTDG2.11
12.50 PM – 1.45 PM - Meeting Room 305

Global Trends that is Shaping the World
Chair: *Su Chan Ho*

Associations & Special Interest Groups:
International Association of Survey Statisticians (IASS), International Association for Official Statistics (IAOS)

- What are the 10 most significant "Mega Trends" to look out for and how will the world develop in the coming years?
- How will the future population growth have an impact in ageing and life expectancy and how will the growing opportunity and inequality affect global populations of the future?
- Which areas of the world will see the biggest rise in mega cities and how will connected-ness through the internet and smartphones evolve over the next few years?

LTDG2.12
12.50 PM – 1.45 PM - Meeting Room 306

Developing Leadership Skills in Women
Chair: *Cathy Furlong*

Associations & Special Interest Groups:
International Statistical Institute (ISI), American Statistical Association (ASA), Women in Statistics

- Learning to reach new levels of personal and professional confidence by broadening your impact
- Transforming your ability to effect organisational and social change on an international scale
- Using emotional intelligence to gain a greater understanding and awareness of your personal strengths, working out who you are, where you are going and how you can make a difference
- Learning from a rich peer group about how other women across different industries and countries have approached and overcome leadership challenges
- Valuing networking and professional societies in developing communication and team working skills
- Promoting the visibility of, and literacy in, statistics among women
- Gaining leadership skills through volunteer activities

D2.01
2.00 PM – 3.40 PM - Ballroom 2

IPS-179: Communicating Central Banks' Statistics Effectively in the Digital Age
Organiser: *Bruno Tissot*
Chair: *Luís Teles Dias*

BCB's strategy for communication of statistics
Fernando Alberto Rocha, Central Bank of Brazil

Big Data: Potential, challenges, and statistical implications
Diane C. Kostroch, International Monetary Fund, USA

Modernising statistics: Communicating the wealth of statistics in a digital age
Per Nymand-Andersen, European Central Bank, Germany

Electronic funds transfers: A novel big data source for analyzing aggregate labor market trends
Wian Boonzaaier, South African Reserve Bank

Bridge between central bank statistics and users: Electronic data delivery system of Central Bank of Turkey
Burcu Tunc, Central Bank of the Republic of Turkey

D2.02
2.00 PM – 3.40 PM - Banquet Hall

IPS-67: Extremes, Graphical Models and Causality
Organiser & Chair: *Sebastian Engelke*

Extremal dependence in a Hüsler–Reiss Markov tree
Johan Segers, Université Catholiquede Louvain, Belgium

Quantile-based approaches for tail causality
Valérie Chavez-Demoulin, University of Lausanne, Switzerland

Recursive max-linear models: From algebra to statistics
Claudia Klueppelberg, Technical University Munich, Germany

D2.03
2.00 PM – 3.40 PM - Conference Hall 1

IPS-151: Computational Statistics and Parallel Computing: Applications for Data Science
Organiser: *Alba Martinez-Ruiz*
Chair: *Juergen Symanzik*

Joining statistical algorithms and parallel Computing: A case on PLS Mode B
Alba Martinez-Ruiz, Catholic University of the Most Holy Conseption, Chile

Improvements on a parallel/distributed algorithm for bootstrapping
Ruben Carvajal-Schiaffino, University of Santiago, Chile

Statistical Computing on Large Parallel Architectures
George Ostrouchov, Oak Ridge National Laboratory and University of Tennesse

D2.04
2.00 PM – 3.40 PM - Conference Hall 2

IPS-60: Modeling Temporal and Spatial Dependence in Bayesian Nonparametrics
Organiser: *Igor Pruenster*
Chair: *Yanxun Xu*

Exploiting conjugacy to build time dependent feature allocation models
Raffaele Argiento, University of Torino, Italy

Dynamic and distributed inference of latent geometric structures arising in topic modelling
Xuanlong Nguyen, University of Michigan, USA

A Bayesian nonparametric spiked process prior for dynamic model selection
Michele Guindani, University of California Irvine, USA

Bayesian Nonparametric Autoregressive Models via Latent Variable Representation
Maria De Iorio, Yale-Nus College, Singapore

D2.05
2.00 PM – 3.40 PM - Conference Hall 3

IPS-256: Modern Robust Statistics on Complex Data
Organiser: *Yiyuan She*
Chair: *Zhao Ren*

Adaptive minimax density estimation for Huber's contamination model under L_P losses
Zhao Ren, University of Pittsburgh, USA

Robust regression with compositional covariates
Aditya Mishra, Flatiron Institute, Simons Foundation, USA

Privacy-preserving parametric inference: A case for robust statistics
Marco Avella-Medina, Massachusetts Institute of Technology, USA

Powerful methods for assessing publication bias
Lifeng Lin, Florida State University, USA

D2.06
2.00 PM – 3.40 PM - Plenary Theatre Auditorium

IPS-25: Recent Developments in High-Dimensional Statistics
Organiser & Chair: *Johannes Lederer*

Theoretical support of machine learning debugging
Po-Ling Loh, University of Wisconsin, USA

Sparse additive modeling and misspecified smoothness
Noah Simon, University of Washington

Adaptive estimation of functionals under sparsity
Mohamed Ndaoud, ENSAE, France

D2.07
2.00 PM – 3.40 PM - Meeting Room 301

IPS-201: ISBIS y-BIS Session: Recent Advances in Statistical Learning Applications
Organiser: *Tahir Ekin*
Chair: *Paulo Canas Rodrigues*

Topic model based learning for medical prescription fraud and abuse detection
Tahir Ekin, Texas State University, USA

A statistical learning model for AIRBNB's hosts
Luca Frigau, University of Cagliari, Italy

Deep learning for energy pricing
Vadim Sokolov, George Mason University, USA

Classification of EEG signals using hybrid artificial intelligence techniques for detection of epileptic seizures
Ozan Kocadagli, Mimar Sinan Fine Arts University, Turkey

D2.08
2.00 PM – 3.40 PM - Meeting Room 302

IPS-227: Data Management in the Era of New Economy and Big Data
Organiser & Chair: *Zima Mazfahani*
Discussant: *Yeah Kim Leng*

The future of Big Data: New typologies of data, analytics and platforms
Richard Harmon, Cloudera, UK

How can organizations best monetize their data?
Madelaine Chew, Mezza9 Solutions, Malaysia

TBA
Yew Choong Chew, RHB Bank, Malaysia

D2.09
2.00 PM – 3.40 PM - Meeting Room 303

IPS-302: Linking the Population and Housing Census with the Agricultural Census: Technological Advances and New Opportunities for Developing Countries
Organiser: *Jairo Castano*
Chair: *Naman Keita*

Linking population and housing census with the census of agriculture for the 2020 round: Overview of issues and options and country examples
Jairo Castano, Food and Agriculture Organisation (FAO), Italy

Linking the population and housing census with the agricultural census: Technological advances and new opportunities for developing countries
Abaye Tariku, Central Statistical Agency of Ethiopia (CSA)

Linking the population and housing census with the agricultural census: Technological advances and new opportunities for developing countries
Maia Guntsadze, Tbilisi Open University, Georgia

D2.10
2.00 PM – 3.40 PM - Meeting Room 304

IPS-253: New Horizon of Methodological Advance for Functional Data Analysis
Organiser: *Byeong Uk Park*
Chair: *Jane-Ling Wang*

Additive regression with Hilbertian responses
Byeong Uk Park, Seoul National University, Korea, Republic of

Wasserstein covariance for vectors of random densities
Hans-Georg Mueller, University of California, USA

Intrinsic Riemannian functional data analysis
Zhenhua Lin, Peking University, University of Toronto, Canada

D2.11
2.00 PM – 3.40 PM - Meeting Room 305

STS-582: Statistical Analysis of Complex Data in Statistical Genetics and Bioinformatics
Organiser: *Shili Lin*
Chair: *Ksenija Dumicic*

Detecting differentially methylated regions accounting for cell purity using Bayesian credible bands
Shili Lin, Ohio State University, USA

Statistical methods for identifying novel promoters
Mijeong Kim, Ewha Womans University, Korea, Republic of

Mendelian randomization, causal relationship, and statistical approaches
Mariza De Andrade, Mayo Clinic, USA

Proteogenomics: Statistical issues in data integration and prediction
Julia Pavan Soler, University of Sao Paulo, Brazil

D2.13
2.00 PM – 3.40 PM - Meeting Room 401

STS-425: Recent Advances in Stochastic Modelling with Application in Business and Industry
Organiser: *Arifah Bahar*
Chair: *Fadhilah Yusof*
Discussant: *Norhaiza Ahmad*

Modelling long memory stochastic volatility of crude palm oil price
Arifah Bahar, Universiti Teknologi Malaysia

On monitoring stock price movements using Markov switching model
Nuririawan, Institut Teknologi Sepuluh Nopember, Indonesia

Two-stage Stochastic programming approach for oil refinery production planning
Zaitul Marlizawati Zainuddin, Universiti Teknologi Malaysia

D2.14
2.00 PM – 3.40 PM - Meeting Room 402

STS-571: Developing Mobile Positioning Data for Official Statistics: Experiences from Europe and Asia
Organiser: *Titi Kanti Lestari*
Chair: *Siim Esko*
Discussant: *Erki Saluveer*

Mobile phone and credit card data: Experience from 10 years of public private partnership
Jaanus Kroon, Eesti Pank, Estonia

Combining mobile phone data and survey data for the best result: Experience from Indonesia
Sarpono Dimuljo, Badan Pusat Statistik Indonesia

The use of mobile phone data
Pasi Piela, Statistics Finland

D2.15
2.00 PM – 3.40 PM - Meeting Room 403

STS-2320: Moving from Traditional Data to Big Data in Assessing Knowledge Societies
Organiser & Chair: *Anthony Fakhoury*
Discussant: *Hany Torky*

On the identification and handling of outliers in composite index numbers
Ali Hadi, American University of Cairo, Egypt

Composite indices and traditional data: The global knowledge index
Mohamed Ali Ismail, Cairo University, Egypt

Future of knowledge – Real time data
Bruno Rodrigues, PwC, UK

D2.16
2.00 PM – 3.40 PM - Meeting Room 404

STS-463: Materializing Labour Account: Ways and Challenges
Organiser: *Nur Layali Mohd Ali Khan*
Chair: *Ibrahim Jantan*
Discussants: *Tite Habiyakare, Yeam Shin Yau*

The need to develop labour account in Malaysia: An assessment
Siti Asiah Ahmad, Department of Statistics Malaysia

Labour supply statistics: Challenges & way forward
Noraliza Mohamad Ali, Department of Statistics Malaysia

D2.17
2.00 PM – 3.40 PM - Meeting Room 405

STS-496: Safeguarding The Professional Independence of Statisticians; The International Experience
Organiser & Chair: *Enrique de Alba Guerra*

INEGI's statistical autonomy: Institutional governance and some ever-present risks
Mario Palma, Instituto Nacionalde Estadística y Geografía (INEGI), Mexico

The requirements for a well-functioning statistical system in a modern democratic society
Roeland Beerten, Flemish Statistical Authority, Belgium

Statisticians misbehaving: The ethical dimensions of an essential profession
Alphonse L. Macdonald, General Bureau of Statistics (ABS), Paramaribo, Suriname

Safeguards for the professional independence of statisticians in Europe
Pilar Martin-Guzman, Autonomous University of Madrid, Spain

D2.18
2.00 PM – 3.40 PM - Meeting Room 406

STS-474: Spatial and Spatio-Temporal Analysis in Social Science
Organiser & Chair: *Yasumasa Matsuuda*

A Copula approach to spatial econometrics with applications to finance
Hideatsu Tsukahara, Seijo University, Japan

On Gaussian semiparametric estimators for two-dimensional intrinsic stationary random fields
Yoshihiro Yajima, Tohoku University, Japan

Spatial extension of Garch models for high dimensional financial time series
Takaki Sato, Tohoku University, Japan

Analysis of regional economic growth against crisis: US-Japan statistical comparative study before-after Lehman's Shock
Gigih Fitrianto, Hiroshima University of Economics, Japan

D2.19
2.00 PM – 3.40 PM - Meeting Room 407

CPS-16: Applications of Statistics: Environment
Chair: *Siti Zakiah Muhamad Isa*

CPS1846: Monthly data set quantifying uncertainties in past global temperatures
Maryam Ilyas, University College London, UK

CPS1911: Modelling wind direction data in Kota Kinabalu coastal station using simultaneous linear functional relationship model
Nurkhairany Amyra Mokhtar, National Defence University of Malaysia

CPS2026: Trends in the extremes of environments associated with severe US thunderstorms, and signals in their spatial dependence
Jonathan Boon Han Koh, EPFL Lausanne, Switzerland

CPS2091: Carbon emissions measurement from the three North eastern Provinces in China and its driving factors – A extended Kaya Identity-LMDI decomposition model study
Biying Dong, Dongbei University of Finance and Economics, China

CPS2219: Stress transfer modelling due to earthquake activity (Case study on Java Island and Bali - Nusa Tenggara Islands)
Hasih Pratiwi, Universitas Sebelas Maret, Indonesia

CPS2277: A study of the factors affecting Hong Kong residents' willingness to pay for waste disposal by Logit models
Miu Han Iris Yeung, City University of Hong Kong

D2.20
2.00 PM – 3.40 PM - Meeting Room 408

CPS-52: Statistical Theory and Methodology
Chair: *Darmesah Gabda*

CPS671: Double perturbation of diffusion processes with reflecting boundary condition
Alioune Coulibaly, University Assane Seck of Ziguinchor, Senegal

CPS1823: Regression for doubly inflated multivariate Poisson distributions
Pooja Sengupta, International Management Institute, Kolkata, India

CPS1941: A new model selection criterion for finite mixture models
Jang Schiltz, University of Luxembourg – LSF

CPS2060: Monitoring unit root in sequentially observed autoregressive processes against local-to-unity hypotheses
Keiji Nagai, Yokohama National University, Japan

CPS2463: A goodness of fit test for Rayleigh Distribution
Husam Awni Bayoud, Fahad Bin Sultan University, Saudi Arabia

D2.21
2.00 PM – 3.40 PM - Meeting Room 409

CPS-50: Demography
Chair: *Norhayati Jantan*

CPS651: Ageing population in Morocco: Reality and challenges
El Mostafa / Togui, High Commission for Planning, Morocco

CPS2082: Monitoring population strategies in GCC: opportunities and challenges
Ali Sulaiman Al Flaiti, GCC Statistical Center (GCC-STAT), Oman

CPS2157: Malaysia's Silver Tsunami: Preparing for the impacts of population ageing
Noor Faadlilah Ismail, Department of Statistics Malaysia

CPS2181: Utilization of civil registration and vital statistics in selected African countries: A review of regional baseline CRVS assessment results
Gilbert Habaasa, Population and Development Consult, Uganda

CPS2253: Weighting longitudinal school surveys with population changes: The Case of Geres
Gabrielle Palermo Alves Palermo Cavalcante, University of Southampton, UK

CPS1339: Identification of Disaggregated Hotspots of Child Morbidity in Bangladesh: An Application of Small Area Estimation Method
Bappi Kumar, Shahjalal University of Science & Technology, Bangladesh

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D2.22
2.00 PM – 3.40 PM - Meeting Room 410

CPS-10: Survey Methodology
Chair: *Santha Vaithilingam*

CPS1308: Undercoverage bias of web survey on smoking and heavy drinking
Jason Hsia, US Centersfor Disease Control and Prevention, USA

CPS1873: Experiences with the theme coding method of cognitive questionnaire testing at Hungarian Central Statistical Office
Ferenc Mújdricza, Hungarian Central Statistical Office

CPS1885: Sample allocation scheme for Gamma Populations based on survey cost
Karuna Garan Reddy, Australian National University, Australia

CPS2074: Estimating measurement errors in mixed-mode surveys using a Multitrait-Multierror Model
Joseph Sakshaug, University of Mannehim / Institute for Employment Research, Germany

CPS2229: Household Income Survey 2019: The sampling methodology
Noor Masayu Mhd Khalili, Department of Statistics Malaysia

CPS2234: Incentive to improve response rate through electronic survey
Rafliza Ramli, Department of Statistics Malaysia

E2.01
4.00 PM – 5.40 PM - Ballroom 2

STS-444: Advances in Modelling Demographic Data
Organiser: *Arezoo Bagheri*
Chair: *Habshah Midi*

Which youths married later than their desired time; classification tree approach
Arezoo Bagheri, National Population Studies and Comprehensive Management Institute, Iran, Islamic Republic

Outlier detection in Poisson Regression Model: Evidence from Bangladesh demographic and health survey data
Sohel Rana, East West University, Dhaka, Bangladesh

Modelling birth intervals by variance-corrected recurrent models
Mahsa Saadati, National Population Studies and Comprehensive Management Institute, Iran, Islamic Republic

E2.02
4.00 PM – 5.40 PM - Banquet Hall

STS-441: Generating New Insights by Using and Linking Micro Data Sets
Organiser: *Bruno Tissot*
Chair: *Gloria Pena*

The fire-sale channels of universal banks in the European sovereign debt crisis
Patrick Weber, Deutsche Bundesbank, Germany

Linking household survey data and administrative statistics: The Banca D'Italia experience
Andrea Neri, Bank of Italy

Linking micro data sets for firms' FX risk monitoring database
Gulbin Sahinbeyoglu, Central Bank of Turkey

Completing the securities picture: Integrating official securities statistics with regulatory trading data
Tobias Cagala, Deutsche Bundesbank, Germany

The integration of micro-data sets into a macro-prudential regulatory landscape, exemplified by the anacredit regulation
Olivia Hauet, Nordea, Sweden

E2.03
4.00 PM – 5.40 PM - Conference Hall 1

STS-500: Big Data in Official Statistics: A new Dimension for Operational Offices
Organiser: *Maslina Samsudin*
Chair: *Norhayati Jantan*

Trip identification process using mobile positioning data
Joko Parmiyanto, Badan Pusat Statistik Indonesia

Use of web-scraping for the compilation of Consumer Price Index: Malaysia's experience
Fauzana Hj. Ismail, Department of Statistics Malaysia

Profiling the internet economy in Singapore
Kit Hoong Choo, Department of Statistics, Singapore

Research on deepening the application of Big Data in government statistics
Jiajing Li, Beijing Municipal Bureau of Statistics, China

E2.04
4.00 PM – 5.40 PM - Conference Hall 2

STS-514: Approaches in Validating Machine-Learning Models for Management of Credit Risk
Organiser & Chair: *Syazwani Hamsani*

Application of machine learning in the prediction of credit defaults
Yoon Tien Yap, RHB Banking Group, Malaysia

Techniques and challenges in validating machine learning model
Vishnu Kamalnath, McKinsey & CO, USA

Overcoming regulatory challenges in using machine learning models
Shafi Ur Rahman, Sr. Principal Scientist, Fair Isaac Corporation (FICO), USA

E2.05
4.00 PM – 5.40 PM - Conference Hall 3

STS-486: Environmental Statistics and Climate Change
Organiser: *Alessandro Fassò*
Chair: *Chuah Kue Peng*

Change detection and harmonisation of atmospheric large spatiotemporal series
Alessandro Fassò, University of Bergamo, Italy

Inspecting ecological communities' structure via functional data analysis
Tonio Di Battista, G. D'annunzio University of Chieti-Pescara, Italy

Recent advances in modelling ecological networks: Regularized grouped Dirichlet-multinomial regression
Ayesha Ali, University of Guelph, Canada

Flexible sub-asymptotic modelling of threshold exceedances using Hierarchical mixture models
Raphaël Huser, King Abdullah University of Science and Technology (KAUST), Saudi Arabia

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E2.07
4.00 PM – 5.40 PM - Meeting Room 301

STS-570: Multinational Profit Shifting and Illicit Flows – Can We Measure Them?
Organiser: *Fernando Cantu*
Chair: *Stephen MacFeely*
Discussant: *Anu Peltola*

Tracking the international footprints of global firms
Mary Everett, Central Bank, Ireland

The emergence of legal and organisational arrangements to minimize global tax burden, and its impact on monitoring domestic economic activities
Peter van de Ven, Organisation for Economic Co-operation and Development (OECD), France

Multinational profit shifting - measurement challenges in the external account
Tjeerd Jellema, European Central Bank, Germany

E2.08
4.00 PM – 5.40 PM - Meeting Room 302

STS-587: Measurement Issues in an Age of Digital Technologies
Organiser: *Yafei Wang*
Chair: *Dong Qiu*

Measuring the structure of digital economy — The case of China
Shujian Xiang, Zhejiang Gongshang University, China

The impacts of digitalisation on China's economic system
Yafei Wang, Beijing Normal University, China

The accuracy and relevance of GDP measures in a digital economy
Chunyun Wang, Beijing Normal University, China

E2.09
4.00 PM – 5.40 PM - Meeting Room 303

STS-541: The Response of the National Statistical Offices in Case of Natural Disasters
Organiser: *Jose Arturo Blancas*
Chair: *Ramón Bravo Zepeda*

Response of the National Institute of Statistics and Geography (INEGI) to natural disasters in Mexico
Jose Arturo Blancas, National Institute of Statistics and Geography of Mexico

The development of disaster statistics in the Philippines: Expenditure accounts on disaster risk reduction
Vivian Ilarina, Philippine Statistics Authority

Responses of the Statistics Bureau of Japan to natural disasters
Masao Takahashi, Statistics Bureau of Japan

E2.10
4.00 PM – 5.40 PM - Meeting Room 304

STS-643: New Bayes Methods for Big Data Sets and Complex Models
Organiser & Chair: *Geoffrey K. Nicholls*

Gaussian Variational approximation for high-dimensional state space models
David Nott, Department of Statistics and Applied Probability, National University of Singapore

New models for symbolic data analysis
Scott A. Sisson, School of Mathematics and Statistics, University of New South Wales, Australia

Calibration procedures for approximate Bayesian credible sets
Kate Lee, University of Auckland, New Zealand

E2.11
4.00 PM – 5.40 PM - Meeting Room 305

STS-699: Harnessing the Power of Data for the 2030 Agenda: Open Data and Building Trust in Data in the New Data Ecosystems
Organiser: *Luis Gonzalez Morales*
Chair: *Francesca Perucci*

Role of data reporting platforms in building trust in official statistics for the 2030 agenda
Dominik Rozkrut, Statistics Poland

Outcomes of the UN World Data Forum 2018 – And what's next?
Lisa Bersales, University of Philippines

Open data and building trust in the new data ecosystems in Palestine
Ola Awad, Palestinian Central Bureau of Statistics, State of Palestine

Dangers and opportunities of using Big Data and unofficial data sources on Official Statistics sites
Mark Herenward, United Nations International Children's Emergency Fund (UNICEF), USA

E2.12
4.00 PM – 5.40 PM - Meeting Room 306

STS-2321: ISI Author Workshop: 'Getting Your Paper Published'
Organiser: *Stephen Raywood*
Chair: *Raymond Chambers*

Panellists
- *Helen Zhang, University of Arizona, USA*
- *Scott Holan, US Census Bureau*
- *Nalini Ravishanker, University of Connecticut, USA*
- *Helen MacGillivray, ISI President*

E2.13
4.00 PM – 5.40 PM - Meeting Room 401

STS-2322: Application of GIS in Statistics and Innovations in Spatial Statistics
Organiser: *Linda Peters*

This session will provide an overview of how GIS is being applied today to statistical workflows, as well as showcase some of the newest innovations in GIS and Spatial Statistics. New tools such as Python Notebooks, R Bridge for ArcGIS will be discussed as well as Geo-AI and Machine Learning.

E2.14
4.00 PM – 5.40 PM - Meeting Room 402

CPS-22: Data Science
Chair: *Liong Choong Yeun*

CPS1196: Clustering Chinese cities' economic growth paths with dynamic time warping
Song Xue, Zhongnan University of Economics and Law, China

CPS1820: High-dimensional microarray data analysis - First success of cancer gene analysis and cancer gene diagnosis
Shuichi Shinmura, Seikei University, Japan

CPS1844: Testing the equality of high dimensional distributions
Reza Modarres, George Washington University, USA

CPS2011: Using SOM-based visualization to analyse the financial performance of consumer discretionary firms
Dominique Haughton, Bentley University, Paris 1 and Toulouse 1 Universities

CPS2018: Using Google Trend Data as an Initial Signal of the Condition of Indonesia's Unemployment Indicator
Rani Nooraeni, STIS Polytecnic Statistic, Indonesia

CPS2449: What can data science do for economic statistics?
Louisa Nolan, Office for National Statistics, UK

E2.15
4.00 PM – 5.40 PM - Meeting Room 403

CPS-28: Official Statistics: National Statistical System
Chair: *Abd Latib Talib*

CPS1464: Exchanging experiences between Arab statistical offices to build a national statistical system
Haidy Samy Mohamed Mahmoud, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS1951: Comparative analysis of R&D statistical systems between China and major developed countries
Yunjie Sun, Chinese Academy of Science and Technology for Development, China

CPS2038: Partnership for compiling official statistics about higher corporation for specialized economic zones (ZONESCORP) in the Emirate of Abu Dhabi
Sami Nizar Khasawneh, Statistics Centre Abu Dhabi, UAE

CPS2460: Statistical performance index - Assessing country-level statistical capacity on a global scale
Juderica Dias, World Bank, USA

CPS2111: Measuring the statistical capacity of nations
Hai-Anh Dang, World Bank, USA

E2.16
4.00 PM – 5.40 PM - Meeting Room 404

CPS-48: Spatial Analysis
Chair: *Rozita Talha*

CPS1280: Spatial analysis of winter rainfall variability of a selected region in South Africa
Willard Zvarevashe, University of Zululand, South Africa

CPS1282: Spatial distribution characteristics of lightning disaster risk and analysis of factors based on GIS---The Case of Hohhot
Jia Liu, Inner Mongolia University of Finance and Economics, China

CPS1333: Spatial Fay-Herriot model for estimating expenditure in Bangka Belitung province, Indonesia
Ahmad Risal, Badan Pusat Statistik Indonesia

CPS1414: Spatial heterogeneity in child labour practices and its determinants in Ghana
Bashiru Imoro Ibn Saeed, Kumasi Technical University, Ghana

CPS1979: Investigating dissimilarity in spatial area data using Bayesian inference: The case of voter participation in the Philippine national and local elections of 2016
Francisco De Los Reyes, University of the Philippines

CPS2230: Using 'RMAPSHAPER' to modify boundary files for use in linked MICROMAP plots
Juergen Symanzik, Utah State University, USA

E2.17
4.00 PM – 5.40 PM - Meeting Room 405

CPS-14: Social
Chair: *Wan Mohd. Shahrulnizam Mohd. Najuri*

CPS1342: Multidimensional poverty in east Nusa Tenggara: A structural equation modelling approach
Astrid Ayu Bestari, Badan Pusat Statistik Indonesia

CPS1398: New Zealand crime and victims survey: Filling the gap
Michael Slyuzberg, New Zealand Ministry of Justice

CPS1471: Impact of education and work status on women's empowerment in Egypt
Lamiaa Mohsen Elgebaly, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS1485: Accessibility statistics to meet the needs of customers of Statistics Finland
Pasi Piela, Statistics Finland

CPS2010: Spatial and temporal trends in non-monetary wealth in Latin America (1990-2010)
Sula Sarkar, Institute for Social Research and Data Innovation, IPUMS, University of Minnesota, USA

CPS2476: Measuring recruitment costs of migrant workers through household surveys: results of the pilot test from Lao PDR labour force survey 2017
Tite Habiyakare, International Labour Organization, Switzerland

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E2.18
4.00 PM – 5.40 PM - Meeting Room 406

CPS-15: Statistical Theory and Methodology
Chair: *Mohd Tahir Ismail*

CPS653: Stochastic search variable selection for definitive screening designs in split-plot and block structures
Chang-YunLin, National Chung Hsing University, Chinese Taipei

CPS1167: Prediction for censored lifetimes from Weibull distribution in Khamis and Higgins Step-stress model
Indrani Basak, Penn State Altoona, USA

CPS1335: On modelling the frequency of antenatal care visits in Bangladesh
Kakoli Rani Bhowmik, Hasselt University, Belgium

CPS1874: A causal inference approach for model validation
Yiyao Chen, Technical University of Munich, Germany

CPS1987: AMMI and GGE Models for multi-environment agricultural field trials
Waqas Malik, University of Hohenheim, Stuttgart, Germany

CPS2106: A linear mixed model for segmented regression with smooth transition
Julio M. Singer, Universidade de São Paulo, Brazil

E2.19
4.00 PM – 5.40 PM - Meeting Room 407

CPS-07: Operational Research
Chair: *Azami Zaharim*

CPS1943: Player selection strategy: A quantitative perspective
Nandish Chattopadhyay, Nanyang Technological University, Singapore

CPS1988: Unreliable retrial queue with two types customers, two delays and vacations perspective
Saggou Hafida Hafida, Universite des Sciences et e la Technologie Houari Boumedienne Alger, Algeria

CPS2088: Advances in maintenance of critical plant machinery equipment, frequency optimization and minimization of breakdowns perspective
Rahul Chattopadhyay, Capgemini, India

E2.20
4.00 PM – 5.40 PM - Meeting Room 408

CPS-34: Statistical Theory and Methodology
Chair: *Kamarulzaman Ibrahim*

CPS1393: A measure of dispersion linked to the generalized mean
Victor M. Guerrero, Instituto Tecnologico Autonomode Mexico (ITAM)

CPS1428: Burr XII distribution and its application in PERT
Enobong Francis Udoumoh, University of Agriculture, Nigeria

CPS1917: Estimation of parameters of a mixture of two exponential distributions
Trijya Singh, Le Moyne College, Syracuse, USA

CPS1923: Test for exponentiality against renewal increasing mean residual life class
Deemat Chamakalayil Mathew, St. Thomas College Palai, India

CPS1973: Structural breaks in nonparametric models via atomic pursuit methods
Matúš Maciak, Charles University, Czech Republic

CPS2101: Nonnegative matrix factorization: A semi-parametric statistical view and model selection
Melanie Zetlaoui, Paris Nanterre University, France

E2.21
4.00 PM – 5.40 PM - Meeting Room 409

CPS-18: Applications of Statistics: Medical
Chair: *Zainuddin Ahmad*

CPS636: Statistical models for longitudinal zero-inflated count data: Application to seizure attacks
Haile Mekonnen Fenta, Bahir Dar University, Ethiopia

CPS1451: Multistate survival modelling: An application to breast cancer patients
Prafulla Kumar Swain, Utkal University, India

CPS1972: Multi-Aspect permutation methods for cytomorphometric data under multivariate directional alternatives with application to comparative neuroanatomy
Livio Corain, University of Padova, Italy

CPS1974: Spatial analysis on human immunodeficiency virus (HIV) infection and acquired immunodeficiency syndrome (AIDS) cases in the Philippines
Lysette Corporal Aguila, Institute of Statistics, University of the Philippines Los Banos

CPS2054: Epidemiology of acute kidney injury in critically ill patients in a South African intensive care unit
Sisa Pazi, Nelson Mandela University, South Africa

CPS2206: A comparison of two estimators for phase II/III clinical trials
Ashna Jabbar Mohammad, Queen Mary University of London, UK

E2.22
4.00 PM – 5.40 PM - Meeting Room 410

CPS-19: Official Statistics: SDG
Chair: *Zuraidy Zainal Abidin*

CPS1277: Use of GIS and statistics in measuringland consumption rate to population growth rate in Egypt
Amal Mohamed El Sharnoby, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS1460: Monitoring sustainable developmental goals: Tracking voluntary tobacco related measures and targets among adults using the global tobacco surveillance system
Krishna M Palipudi, Centers for Disease Control and Prevention (CDC), USA

CPS1830: A demographic overture of future vision beneath SDGs in Egypt
Dalia Galal Elabady, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS1996: The relationship between income inequality and disparity education and effect to achieve SDGs in Egypt
Ali Hebishi Kamel Abdelhamid, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS2259: Functional areas: Opportunities for 'Leave No One Behind' agenda and statistical challenges
Florabela Carausu, GOPA Luxembourg S.A.R.L

CPS2565: Youth empowerment and sustainable urban development
Arun Kumar Sinha, Central University Bihar, India

21st August 2019 (Wednesday)

Updated as at 17th August 2019

A3.01
8.50 AM – 10.00 AM - Ballroom 2

SIPS-138: ASMBI Journal Session
Organiser & Chair: *Fabrizio Ruggeri*
Discussants: *Tahir Ekin, David Banks*

Machine learning applications in nonlife insurance
Yves Laurent Grize, Zurich University of Applied Sciences, Switzerland

A3.02
8.50 AM – 10.00 AM - Banquet Hall

SIPS-350: IASC President's Lecture
Organiser & Chair: *Wing Kam Fung*

Inference on the best selected subgroup
Xuming He, University of Michigan, USA

A3.03
8.50 AM – 10.00 AM - Conference Hall 1

SIPS-2339: Official Statistics: Challenges and Opportunities in NSOs and Central Banks
Organisers: *Helen MacGillivray, Bruno Tissot*
Chairs: *Gabriella Vukovich, Aurel Schubert*

Official Statistics – Challenges and opportunities for NSOs and NCBs *The views of the ECB*
Silke Stapel, European Central Bank

Let's keep leading
Gloria Peña, Central Bank

The turtle and the rabbit – the agility challenge of official statistics
Konrad Pesendorfer, Statistics Austria

Opportunities and Challenges Facing China's Official Statistics
LYU Haiqi, National Bureau of Statistics of China

A3.04
8.50 AM – 10.00 AM - Conference Hall 2

SIPS-368: Statistical Societies Presidential Lectures 2
Organiser & Chair: *Helen MacGillivray*

Institute of Mathematical Statistics
Susan Murphy, Harvard University, USA

The Royal Statistical Society: How is a society with 19th century roots staying relevant in the 21st century?
Deborah Ashby, Imperial College London, UK

B3.01
10.30 AM – 12.30 PM - Ballroom 2

SIPS-125: Ties Presidential Session
Organiser: *Giovanna Jona Lasinio*
Chair: *Alessandro Fassò*

Atmospheric carbon and the statistical science of measuring, mapping and uncertainty quantification
Noel Cressie, University of Wollongong, Australia

Modelling 4D climate variables using functional data analysis
Francesco Finazzi, University of Bergamo, Italy

Modeling global climate data on a grid
Stefano Castruccio, University of Notre Dame, USA

B3.02
10.30 AM – 12.30 PM - Banquet Hall

IPS-298: Towards Universal Holistic Framework of Monitoring and Evaluation of SDG
Organiser: *Nor Alkashah Arif Shah*
Chair: *Nazaria Baharudin*

How do national targets measure up to global vision of the 2030 agenda?
Mark Courtenay Hereward, UNICEF, USA

Sustainable Development Goals (SDGs) in Malaysia: Initial assessment on data readiness and challenges
Ahmad Jessree Kamaruddin, Department of Statistics Malaysia

Measuring Sustainable Development Goals Indicators (SDGs) in Egypt: Challenges, Opportunities, Progress and Innovations
Waleed Ameen Abdelkhalik Mohammed Abofdan, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

B3.03
10.30 AM – 12.30 PM - Conference Hall 1

IPS-188: Short Term Surveys, Big Data and Inflation
Organiser: *Bruno Tissot*
Chair: *Gabriel Quiros*
Discussant: *Vagner Laerte Ardeo*

The KOF-FGV global economic barometer: A composite leading indicator for the world economy
Jan-Egbert Sturm, CIRET c/o KOF Swiss Economic Institute, Switzerland

Can inflation expectations in business or consumer surveys improve inflation forecasts?
Jana Jonckheere, National Bank of Belgium

Inflation expectations in India: Learning from Household Tendency Surveys
Abhiman Das, Indian Institute of Management Ahmedabad

Does google search index help track and predict inflation rate? An exploratory analysis for India
Gobinda Prasad Samanta, Reserve Bank of India

The role of big data and surveys in predicting inflation
Bruno Tissot, Bank for International Settlements, Switzerland

B3.04
10.30 AM – 12.30 PM - Conference Hall 2

IPS-307: Special purpose entities: How Can Such a Challenge to Macroeconomic Statistics Be Mitigated?
Organiser: *Carlos Sanchez-Munoz*
Chair: *Gabriel Quiros-Romero*

IMF strategy for addressing statistical gaps related to the existence of special purpose entities
Carlos Sanchez-Munoz, International Monetary Fund, USA

Measuring international financial integration: A practitioner's perspective
Gian Maria Milesi-Ferretti, International Monetary Fund, USA

The Bank of Mauritius Experience in the Collection of Special Purpose Entities' Statistics
Jitendra Nathsingh Bissessur, Bank of Mauritius

Panellists
- *Tjeerd Jellema, European Central Bank*
- *Melle Bijlsma, de Nederlandsche Bank*
- *Maria Borga, OECD*

B3.05
10.30 AM – 12.30 PM - Conference Hall 3

IPS-80: Bernoulli Society New Researcher Award Session 2019
Organiser: *Leonardo Rolla*
Chair: *Susan Murphy*

Optimization challenges from Robust statistics
Po-Ling Loh, University of Wisconsin-Madison, USA

Partial identifiability of restricted latent class models
Gongjun Xu, University of Michigan, USA

Fisher's combined probability tests for complex, high dimensional data
Lingzhou Xue, Pennsylvania State University, USA

B3.06
10.30 AM – 12.30 PM - Plenary Theatre Auditorium

IPS-107: YS-ISI Session: Computational Statistics and Applications
Organiser & Chair: *Han-Ming (Hank) Wu*

Regularized partially functional autoregressive model in high dimension with application to natural gas flows in Germany
Xiaofei Xu, National University of Singapore

Statistical estimation for non-smooth functions by deep neural networks
Masaaki Imaizumi, The Institute of Statistical Mathematics, Japan

On developing general and efficient inference algorithms for complicated hierarchical models
Thordis Thorarinsdottir, Norwegian Computing Center, Norway

TBA
Gloria Mathenge, United Nations Economic Commission for Africa

B3.07
10.30 AM – 12.30 PM - Meeting Room 301

IPS-236: Digitisation, Globalisation - Statistical Associations' Role at National, European and International Level
Organiser & Chair: *Walter J. Radermacher*
Discussants: *Konrad Pesendorfer, Helen MacGillivray, Andrea Silke Stapel-Weber*

Data to change: The role of statistical associations
Monica Pratesi, Italian Statistical Society

Influence of the digital era and globalisation on the functioning of national statistical societies
Eva Laczka, Hungarian Statistical Association

Individuals using the internet for ordering goods or services related to selected digital and economic development level indicators: Cluster analysis of European countries
Ksenija Dumicic, Croatian Statistical Association

B3.08
10.30 AM – 12.30 PM - Meeting Room 302

IPS-229: Ubiquity and Risks of Machine-Generated Algorithms
Organiser: *Mary W. Gray*
Chair: *Jane Wall*

Ubiquity and risk of algorithms
Mary W. Gray, American University

AI, statistics and the law
Fabro Steibel, ITS, Rio de Janeiro, Brazil

Biases in predictive analytics models with emphasis on growth scoring and credit scoring models for micro and small enterprises
Faisal Awartani, Insights Consulting, Ramallah, State of Palestine

The lack of privacy protection in entity resolution
Rebecca Steorts, Duke University, USA

B3.09
10.30 AM – 12.30 PM - Meeting Room 303

IPS-122: How to Create Innovative Environments to Harness Big Data in Official Statistics: Examples from Four National Statistical Institutes
Organiser: *Anders J S Holmberg*
Chair: *Eduardo Barredo-Capelot*
Discussant: *Vince Galvin*

Big insights through a partnership model: Statistics Norway's approach to build capabilities to use unconventional data in official statistics
Anders J S Holmberg, Statistics Norway

Innovation in a National Statistical Institute: The UIK data science campus
Tom Smith, Office of National Statistics, UK

How to create innovative environments to harness Big Data in official statistics
Sofie De Broe, Statistics Netherlands

The SSP lab: The French NSI data science lab experience
Èlise Coudin, INSEE, France

B3.10
10.30 AM – 12.30 PM - Meeting Room 304

IPS-146: The Quality of Big Data is More Than a Problem Today (Overview with Recommendations)
Organiser: *Vasiliy Simchera*
Chair: *Jozef Olenski*
Discussant: *Misha Belkindas*

The role of Big Data in the improvement of consistency between Balance of Payments and Tourism Statistics
Marek Ciepial-Wolan, Polish Statistical Association - Branch in Rzeszow

Stochastic search model and elimination of false data
Vladimir Kulikov, International Institute for Social and Economic Studies, UK

Prospects for the development of higher education based on Big Data technology
Ruslan Motoryn, KYIV National University of Trade and Economics, Ukraine

The quality of Big Data is more than a problem today (overview)
Sergey Nesterov, Coutts Communications, Australia

Big Data and metrics of solidarity economy
Jan Simchera, International Institute of Engineering and Economical Studies, Russia

B3.11
10.30 AM – 12.30 PM - Meeting Room 305

IPS-109: Statistical Literacy and Citizen's Participation: A Call for Civic Statistics
Organiser: *Joachim Engel*
Chair: *Teresita Evelina Terán*
Discussant: *Stephen MacFeely*

Civic statistics: Big ideas, needs and challenges. Why we need a new subdiscipline?
Joachim Engel, Ludwigsburg University of Education, Germany

Civicstatsmap: Mapping resources to improve civic statistics
Pedro M. Campos, University of Porto, Portugal

Promoting civic statistics - From the perspective of a data science in social responsibility
Daniel Frischemeier, University of Paderborn, Germany

Citizen empowerment - Changing the face of statistical literacy
Rosie Ridgway, University of Durham, UK

B3.12
10.30 AM – 12.30 PM - Meeting Room 306

IPS-51: Linked Data Quality: Measurement and Correction of Errors for Better Use of Linked Data
Organiser: *Andrea Diniz da Silva*
Chair: *Angela Luna Hernandez*
Discussant: *Partha Lahiri*

Problems when using the F-measure for evaluating record linkage systems
Peter Christen, Australian National University

Small area estimation with linked data under area membership uncertainty
Raymond Chambers, University of Wollongong, Australia

B3.13
10.30 AM – 12.30 PM - Meeting Room 401

IPS-156: Statistics for Climate Extremes
Organiser & Chair: *Holger Rootzén*

Nonstationary modeling of storm surges
Peter Guttorp, Norwegian Computing Center

An entropy-based test for multivariate threshold exceedances
Sebastian Engelke, University of Geneva, Switzerland

Generalised peaks over threshold inference for complex events
Anthony C. Davison, Ecole Polytechnique de Lausanne, Switzerland

Climate event attribution using multivariate peaks-over-thresholds modelling
Anna Kiriliouk, Erasmus University Rotterdam, Netherlands

B3.15
10.30 AM – 12.30 PM - Meeting Room 403

IPS-102: Income Consumption and Wealth Statistics with Focus on Inequality
Organiser: *Sigita Grundiza*
Chair: *Mariana Kotzeva*

Inclusive growth: Does economic growth benefit all?
Peter van de Ven, Organisation for Economic Co-operation and Development (OECD), France

A complete measure of wealth and wealth inequality
Arjan Bruil, Statistics Netherlands

Income, consumption and wealth data integration - A household perspective
Friderike Oehler, Eurostat, Luxembourg

Measurement of wealth inequality with distributional financial accounts indicators
Ilja Kristian Kavonius, ECB, Germany

B3.16
10.30 AM – 12.30 PM - Meeting Room 404

STS-579: Asymptotic Behavior and Numerical Simulation of Stochastic Evolutionary Systems
Organiser: *Elena Yarovaya*
Chair: *Stanislav Molchanov*
Discussant: *Larisa Afanas'eva*

Stochastic evolutionary system on multidimensional lattices
Elena Yarovaya, Lomonosov Moscow State University, Russia

Bayesian inference for a two-type controlled branching model for an oligodendrocyte cell population
Carmen Minuesa Abril, University of Extremadura, Spain

Nonparametric Bayesian inference for Ylinked two sex branching processes with blind choice using MCMC methods
Cristina Gutierrez, Extremadura University, Spain

Simulation of branching random walks with different intensity of branching sources
Daria Balashova, Lomonosov Moscow State University, Russia

Survival analysis of particle populations in branching random walks
Anastasiia Rytova, Lomonosov Moscow State University, Russia

Computational modelling of cancer evolution by multi–type branching processes
Maroussia Nikiforova Slavtchova-Bojkova, University "ST. Kliment Ohridski", Bulgaria

B3.17
10.30 AM – 12.30 PM - Meeting Room 405

STS-483: Advances in Spatial and Temporal Modelling for Environmental Data
Organiser & Discussant: *Sujit Kumar Sahu*
Chair: *Dankmar Boehning*

Bayesian modeling for spatially misaligned health and air pollution data through the INLA-SPDE approach
Marta Blangiardo, Imperial College London, UK

A Bivariate spatiotemporal model to estimate the probability of air pollution emergency alerts in Mexico City
Eliane R. Rodrigues, Universidad Nacional Autónoma de México

Bayesian spatio-temporal modelling for precipitation volume with an application to Hubbard Brook Ecosystem Study
Khandoker Shuvo Bakar, CSIRO, Australia

Spatial-temporal Gaussian State-Space Models
Debashis Mondal, Oregon State University, USA

B3.18
10.30 AM – 12.30 PM - Meeting Room 406

STS-540: Recent Advancement in Statistical Process Monitoring and Its Applications
Organiser & Discussant: *Amitava Mukherjee*
Chair: *Rob Goedhart*

A nonparametric GWMA control chart based on the moving sign statistics
Sin Yin Teh, Universiti Sains Malaysia

Process monitoring and decision based on Zero-Inflated Models
Tahir Mahmood, City University of Hong Kong

Optimal design of distribution-free Exponentially Weighted Moving Average Schemes with dynamic fast initial response for joint monitoring of location and scale
Zhi Song, Liaoning University and Shenyang Agricultural University, China

Shewhart X-Bar monitoring schemes with supplementary side-sensitive runs-rules for the burr-type XII distribution
Marien A. Graham, University of Pretoria, South Africa

A comparative study between the standard deviation of the time to signal (SDTS) performance of the GR and SSGR schemes
Zhi Lin Chong, Universiti Tunku Abdul Rahman, Malaysia

B3.19
10.30 AM – 12.30 PM - Meeting Room 407

STS-547: What to Do When Our Assumptions Fail? Extending Dual and Multiple Systems Population Estimation to Meet the Challenges of Modern Data Sources
Organiser: *Tracey Savage*
Chair: *Christine Bycroft*
Discussant: *Paul Smith*

Dual-system estimation by another name: Population size estimation using weighting classes
Owen Abbott, Office for National Statistics, UK

New population estimation methods: New Zealand and Ireland
John Dunne, CSO Ireland

Multiple system estimation for the size of the Māori population in New Zealand
Peter G.M. Van Der Heijden, Utrecht University and University of Southampton, UK

A General Framework for Multiple - Recapture Estimation that Incorporates Linkage Error Correction
Daan Zult, CBS Netherland

B3.20
10.30 AM – 12.30 PM - Meeting Room 408

STS-556: Advanced Statistical Modeling for Data Analysts
Organiser & Chair: *Rossita Mohamad Yunus*

Recovery signal of heavy-tailed data from noise with outliers and higher volatility
Mohd Bakri Adam, Universiti Putra Malaysia

Shape Model and Shape Discrimination of Dental Arches
Norli Anida, University of Malaya

A novel Bayesian matrix analytic approach for small area estimation
Azizur Rahman, Charles Sturt University, Australia

Trade Credit – An Empirical Analysis of Indian firms
Arvind Srivastava, Reserave Bank of India

B3.21
10.30 AM – 12.30 PM - Meeting Room 409

STS-489: Advances in Bayesian Spatio-Temporal Modelling of Disease Risk Based Complex Household Surveys in Sub-Saharan Africa (SSA)
Organiser & Chair: *Ngianga-Bakwin Kandala*
Discussant: *Samuel Manda*

Geographic variation, trends and determinants of hypertension in South African adult population, 2008-2017
Glory O Atilola, Northumbria University, UK

Modelling spatio-temporal patterns of disease for spatially misaligned data: An application to disease data in Namibia, 2006-2013
Lawrence Kazembe, University of Namibia

Modelling and mapping prevalence of female genital mutilation/cutting among 0-14 years old girls in Kenya, Nigeria and Senegal
Christopher Nnanatu, Northumbria University, UK

Spatial heterogeneity of childhood anaemia in four Sub-Saharan African countries
Danielle Jade Roberts, University of Kwazulu-Natal, South Africa

B3.22
10.30 AM – 12.30 PM - Meeting Room 410

STS-2319: Asian Development Bank's Support to Innovative Data Collection and Analytical Methods
Organiser & Chair: *Mahinthan J. Mariasingham*

Enhancing small area poverty estimates using satellite imagery
Arturo Martinez, Asian Development Bank, Philippines

Measuring rice yield from space: The case of Thai Binh province, Vietnam
Nagraj Rao, Asian Development Bank, Philippines

How much better is better? Quantifying the CAPI advantage using Vietnam's labor force survey
Jude David Roque, Asian Development Bank, Philippines

Lessons learned from conducting two online training courses on Computer-Assisted Personal Interviewing (CAPI)
Elisabetta Gentile, Asian Development Bank, Philippines

CE3.01
12.30 PM – 1.10 PM - Foyer Level 3 (East)

CPS2415-01: Research of better life index and empirical analysis of Beijing
Jingwei He, Beijing Municipal Bureau of Statistics

CPS2416-02: Research on building a modern statistical investigation system
Lufang Liu, Beijing Municipal Bureau of Statistics

CPS2417-03: Research on monitoring and evaluation system for the long-term mechanism of Beijing real estate market
Shuming Xu, Beijing Municipal Bureau of Statistics

CPS2418-04: Analysis of the impact of demographic shift on housing demand in Beijing
Lin Zhang, Beijing Municipal Bureau of Statistics

CPS2055-05: Construction of a survival tree based on concordance probability
Asanao Shimokawa, Tokyo University of Science

CPS1930-06: Combining Lasso and Liu type estimator in the linear regression model
Kayanan Manickavasagar, Postgraduate Institute of Science, University of Peradeniya, Sri Lanka

CPS1932-07: Spatial analysis for forced displacement and war actions. Colombian case
Carlos Alfonso Mantilla Duarte, Universidad Industrial de Santander, Colombia

CPS1935-08: An attempt to determine a confidence interval for the economic growth rate-case of the Moroccan economy
Ahmed Oulad El Fakir, Haut-Commissariat Au Plan, Morocco

CPS1936-09: Reduced social accounting matrix for Mozambique
Eliza Monica Ana Magaua, National Institute of Statistics of Mozambique

CPS1937-10: Data mining of mobility table based on community discovery methods
Xu Sun, Dongbei University of Finance and Economics, China

CPS1958-11: Smart meters' data as a source of household and farms statistics
Marwa Farouk Elkabbany, Federal Competitiveness and Statistics Authority, Egypt

CPS1939-12: Integration of statistics on gender and sustainable development through capability building
Ana Julia Javier Macaraig, Philippine Statistical Research and Training Institute

CPS1942-13: Estimation using probability proportional to aggregate size sampling in heterogeneous populations
Daniel David Martinez Pamplona, University of the Philippines

CPS2456-14: Absolute partial mean curve: An alternative to receiver operating characteristic curve
Pramod K. Gupta, PGIMER, India

CPS1950-15: Fuzzy clustering in a reduced subspace
Paolo Giordani, University of Rome, Sapienza

CPS2051-16: Construction of forward looking distributions using limited historical data and scenario assessments
Mentje Gericke, North-West University, South Africa

CW3.01
12.30 PM – 1.10 PM - Foyer Level 3 (West)

CPS2040-24: Summary of bio-statistical consultation for clinical research support in Japan
Makoto Tomita, Yokohama City University, Japan

CPS2042-25: Improving paddy rice statistics using area sampling frame technique
Anna Christine De Padua Durante, Asian Development Bank, Philippines

CPS1969-26: Testing for independence on statistically matched categorical variables
Janna De Veyra, University of the Philippines Diliman

CPS2063-27: Do expenditure for environment does matter?
Ismail Abdul Rahman, Department of Statistics Malaysia

CPS2065-28: Assessment in an introductory statistics course – The challenge of consensus
Lina Schelin, Umeå University, Sweden

CPS2014-29: Data boosting on short bivariate time series data by Sieve bootstrap
Ma. Salvacion Belandres Pantino, University of the Philippines Cebu

CPS2205-30: Comparative model analysis of customer retention drivers of universal banks in Ghana: Structural equation model and ordinal logit model approaches
Abdul-Aziz Abdul-Rahaman, Kumasi Technical University, Ghana

CPS1989-31: A research on indicator system and evaluation of high-quality development in Qingdao
Zhenqiang Yuan, Qingdao Statistical Institute, China

CPS1992-32: On the mixture of two power function distributions
Epimaco Alamares Cabanlit, Mindanao State University, General Santos City, Philippines

CPS1993-33: Couple's time allocation to housework and childcare: Moroccan evidence
Asmae Mhmmoudi, High Commission for Planning, Morocco

CPS1995-34: A mixed models approach to extrapolation of clinical data
Daniel Cruz Bonzo, LFB, USA

CPS2000-35: Statistics training in a developing country: Prospects and challenges experienced in the last two decades at the school of statistics and planning, Makerere University, Uganda
Agnes Mary Nanziri Ssekiboobo, Makerere University, Uganda

CPS2113-36: Automatic assignment of underlying cause of death based on verbal autopsy instrument
Lucia Pereira Barroso, University of São Paulo, Brazil

CPS2007-37: Richness estimation with species identity error
Jai-Hua Yen, National Taiwan University

CPS2043-38: Enhancing the efficiency of the proxy mean test formula
Hanan Ali Al Marzooqi, Statistics Centre Abu Dhabi, UAE

CPS1980-39: The analysis of crime as the impact of economic and social dynamic in Indonesia
Putri Vinasella Vrasedya, Indonesia

CE3.02
1.20 PM – 2.00 PM - Foyer Level 3 (East)

CPS2046-01: Building statistical electronic partnerships with Statistics Centre – Abu Dhabi (SCAD) stockholders, Statistics Centre – Abu Dhabi (SCAD) happiness portal
Suhaila Ahmed Al Balooshi, Statistics Centre Abu Dhabi, UAE

CPS2057-02: Variation in copy number on the genome of the Brazilian population
Julia Pavan Soler, University of São Paulo, Brazil

CPS2049-03: The quality challenges in the administrative data
Maitha Mohammed Al Junaibi, Statistics Centre Abu Dhabi, UAE

CPS2050-04: The statistical confidence crisis in sport sciences: Is It All "Shoddy statistics"?
Marijke Welvaert, University of Canberra, Australia

CPS2168-06: Combining two statistics methods for better strategy of development achievement spatially
Dwinda Astuti Puspaningrum, Badan Pusat Statistik, Indonesia

CPS1241-07: On the limiting behavior of estimators of the adjustment coefficient in risk theory
Abdellah Ould Khal, University Med V, Morrocco

CPS1248-08: A test of comparison between newly convoluted distributions
Itoro Tim Michael, University of Lagos

CPS1365-09: Analevr: A Modular R-Based clustered analysis platform as a service for utilizing open data
Erika Mukhlisina Siregar, Badan Pusat Statistik, Indonesia

CPS1357-10: Convergence of quartile stochastic processes
Modou Ngom, Lerstad, UGB, Saint-Louis, Senegal

CPS1362-11: Asymptotic multinomial representations for divergence measures for discrete data and implications
Diam Ba, Gaston Berger University, Senegal

CPS1962-13: Qualitative reduction of Whoqol questionnaires
Olabimpe Aladeniyi, Federal University of Technology, Akure, Nigeria

CPS1102-14: Perspective of researchers towards conducting a clinical research in India
Gayatri Vishwakarma, Rajiv Gandhi Cancer Institute & Research Centre, India

CPS2161-15: Profit analysis of a parallel-unit system with degradation and preventive maintenance
Jitender Kumar, Kurukshetra University, India

CPS667-16: Using brain storming in training enumerators for Egyptian Census 2017 to develop their communications skills with households
Waleed Mohammed, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS1975-17: Tourism object data register application in Papua, Papua Barat, and Nusa Tenggara Timur Province of Indonesia
Christiayu Natalia, Badan Pusat Statistik Indonesia

CPS1977-18: Depth for Riemannian Manifold-Valued functional data based on optimal transport
Ke Yu, University of Oxford, UK

CPS1422-19: A modified classification method based on rank regions
Olusola Samuel Makinde, Federal University of Technology, Akure, Nigeria

CPS1105-20: Model selection for Bayesian linear mixed models with longitudinal data. Sensitivity to the choice of priors
Oludare Samuel Ariyo, Federal University of Agriculture Abeokuta, Nigeria

CW3.02
1.20 PM – 2.00 PM - Foyer Level 3 (West)

CPS2120-24: The impact of longevity on a valuation of long-term investments returns: The case of selected European countries
Grażyna Trzpiot, Poland

CPS2094-25: Causal inference in sport date ~Causal model of fly ball revolution in NPB
Yoshimitsu Morinishi, Rikkyo University, Japan

CPS2118-26: Measuring real GDP and changes in the terms of trade across space and time
Yan Wang, Dongbei University of Finance and Economics, China

CPS2098-27: Tests for mean vector using approximate degrees of freedom with two-step monotone missing data
Tamae Kawasaki, Tokyo University of Science

CPS2099-28: Reduced K-Means with nonlinear principal component analysis
Yuichi Mori, Okayama University of Science

CPS2130-29: Comparative performance of estimation maximisation and other known methods of residual estimators in structural equation models
Abdul-Aziz Abdul-Rahaman, Kumasi Technical University, Ghana

CPS2102-30: Too many zeros? Are Two-Part models a good choice for the analysis of longitudinal data in health care research?
Iris Reinhard, Central Institute for Mental Health, Medical Faculty Mannheim / Heidelberg University, Germany

CPS2103-31: Assessing trust in official statistics for Southeaster European countries
Helda Curma, Institute of Statistics Albania (INSTAT)

CPS2105-32: Comparison of Arima, Neural Network and Wavelet models for forecasting Indonesia Sharia Stock index
Hermansah, Indonesia

CPS2108-33: Determinants of urban development in Egypt
Azza Hassan Borae, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS2110-34: A simulation study on the score test for Poisson overdispersion under different forms of the variance
Johann Sebastian Bermudez Claveria, University of the Philippines

CPS1094-35: Africa's participation in international statistical literacy project
Elieza Paul Milonga, International Statistical Literacy Project-Tanzania

CPS2268-36: New weighted extreme value index estimator for right-truncated data
Saida Mancer, Mohamed Khider University, Biskra, Algeria

CPS2112-37: Spatial analysis of ICT development index in Indonesia
Nur Salmanah, Badan Pusat Statistik Indonesia

CPS2004-38: On similarity patterns on GABECE data
Soumaila Dembele, FSEG, Mali

CPS2115-39: Does parents' mental disorders affect child behaviour via home environments and/or parents' education? A mediation analysis
Md Jamal Uddin, University of Copenhagen, Denmark

CPS1949-40: Measure of multidimensional poverty robustness of indices to weighting schemes
Khalid Soudi, Morocco

CPS2013-41: Recursive variable selection and support vector regression to improve estimation of immune cell proportion in a tumor
Mónica Balzarini, CONICET, Argentina

CPS1374-42: Spatial analysis of soil pollution in Benin City
Osahon Jeffery Asowata, University of Ibadan, Nigeria

CPS1390-43: Students' preferences for mobile telecom plans in University of Kwazulu-Natal, South Africa: A discrete choice experiment
Chidimma Evangeline Oliobi, University of Kwazulu-Natal, South Africa

LTDG3.10
12.50 PM – 1.45 PM - Meeting Room 304

Challenges for official statistics
Chairs: *Aurel Schubert & Gabriella Vukovich*

Associations & Special Interest Groups:
Irving Fisher Com. (IFC), International Association for Official Statistics (IAOS)

- Should the Fundamental Principles defined for the perimeter of Official Statistics be refined in view of new priorities, rising costs, and resource shortages?
- The interaction with new types of stakeholders is posing new challenges, especially in terms of quality, accuracy, privacy, ownership, and reputation. What are the options for the way forward?

LTDG3.11
12.50 PM – 1.45 PM - Meeting Room 305

Perennials & Ageism - The Future of Ageing
Chair: *Arun Menon*

Associations & Special Interest Groups:
International Association of Survey Statisticians (IASS)

- What are the expectations and concerns of the current generation relating to later life and old age?
- What are people globally doing in preparation to later life and how will technology improve old age?
- Why is there generally a negative perception towards old people and what are the steps that can be taken to eradicate 'ageism'?

LTDG3.12
12.50 PM – 1.45 PM - Meeting Room 306

New Trends in Modelling Climate Change in the Era of Big Data
Chair: *Osulale Peter Popoola*

Associations & Special Interest Groups:
International Association for Official Statistics (IAOS)

- How do we model the effect of climate change in the era of Big Data?
- What are the problems of Big Data in modelling the effect of climate change?

D3.01
2.00 PM – 3.40 PM - Ballroom 2

IPS-177: Benefitting from Data Sharing Between Institutions
Organiser: *Bruno Tissot*
Chair: *Moon So Sang*

Trade repository data - Data access and sharing
Jose Maria Serena, Bank for International Settlements, Switzerland

Progress in Japan to Implement the DGI-2 on Securities Statistics and Institutional Sector Accounts
Sayako Konno Mizuno, Bank of Japan

"FSA WG of the ECCBSO: Collaboration between Banco de España and other European NCB to improve the analysis of non-financial corporations' data by data sharing"
Luis Ángel Maza Lasierra, Bank of Spain

A reflection on privacy and data confidentiality in official statistics
Aleksandra Bujnowska, Eurostat, Luxembourg

D3.02
2.00 PM – 3.40 PM - Banquet Hall

IPS-96: Astrostatistics: Challenges in Time Domain Astronomy
Organiser & Chair: *Jogesh Babu Gutti*
Discussant: *Fionn Murtagh*

Autoregressive modeling of regularly and irregularly spaced astronomical time series
Eric D Feigelson, The Pennsylvania State University, USA

LSST: The greatest color movie of the universe is coming to you!
Zeljko Ivezic, University of Washington, USA

Adventures in astrostatistics: Black holes and beyond
Ilya Mandel, University of Birmingham, UK

D3.03
2.00 PM – 3.40 PM - Conference Hall 1

IPS-61: New Developments in Time Series Analysis for Complex Data
Organiser: *Alexander Aue*
Chair: *Po-Ling Loh*

Testing for stationarity of functional time series in the frequency domain
Alexander Aue, University of California, USA

The use of shape constraints for modeling time series of counts
Richard Davis A, Columbia University, USA

Granger causality in yield curves of different markets
Rituparna Sen, Indian Statistical Institute

High dimensional and banded vector auto regressions
Qiwei Yao, London School of Economics & Political Science, UK

D3.04
2.00 PM – 3.40 PM - Conference Hall 2

IPS-139: Impact Evaluation for Small Areas
Organiser & Chair: *Stefan Andreas Sperlich*

A General Framework for Multiple Inference in Linear Mixed Models
Stefan Andreas Sperlich, University of Geneva, Switzerland

Small area estimation for generalization
Wendy Chan, University of Pennsylvania, USA

Causal inferences in small area estimation
Setareh Ranjbar, University of Geneva, Switzerland

Simultaneous prediction intervals for small area parameter
Katarzyna Reluga, University of Geneva, Switzerland

D3.05
2.00 PM – 3.40 PM - Conference Hall 3

IPS-26: Perspectives on Statistical Methods for Time Dependent Processes
Organiser & Chair: *Arturo Kohatsuhiga*

A rough path approach to statistical inference for stochastic processes
Anastasia Papavasiliou, Warwick University, UK

Asymptotic mixed normality of realized covariance in high-dimensions
Yuta Koike, University of Tokyo, Japan

Parameters estimation in a threshold diffusion
Paolo Pigato, Weierstrass Institute for Applied Analysis and Stochastics, Germany

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D3.06
2.00 PM – 3.40 PM - Plenary Theatre Auditorium

IPS-275: Improving the Evidence Base for Policy Making Through Innovations in Data Collection and Analysis
Organiser & Chair: *Kenneth Simler*
Discussant: *Richard Record*

Blackout or blanked out? Monitoring the quality of electricity service in developing countries
William Seitz, World Bank, USA

News-based forecasts of economic indicators
Samuel Fraiberger, World Bank , USA

D3.07
2.00 PM – 3.40 PM - Meeting Room 301

IPS-278: Data Science, Statistics and Information Generation
Organiser: *Nalini Ravishanker*
Chair: *Ron S. Kenett*

Enterprise business metric forecasting
Beatriz E. Etchegaray Garcia, IBM T.J. Watson Research Center, USA

Diversity in personalised recommendations with uncertainty using the Bayesian Mallows model
Arnoldo Frigessi, University of Oslo, Norway

Forecasting is not prophecy: Dealing with high-dimensional probabilistic forecasts in practice
Rob J. Hyndman, Monash University, Australia

Extending the customer lifecycle: Optimal resource allocation throughout the customer journey
V. Kumar, Georgia State University

D3.08
2.00 PM – 3.40 PM - Meeting Room 302

IPS-64: Recent Advances in Statistical Data Integration
Organiser: *Partha Lahiri*
Chair: *Noor Akma Ibrahim*
Discussants: *Cinzia Cirillo*, *Snigdhansu Chatterjee*

An approximate Bayesian approach for solving different inferential problems in poverty research for small areas
Jiraphan Suntornchost, Chulalongkorn University, Thailand

Recent development of methodology and software on data integration at ISTAT
Tiziana Tuoto, ISTAT, Italy

Nowcasting of state level poverty using Indian Household Consumer Expenditure Survey data
Partha Lahiri, University of Maryland, USA

D3.09
2.00 PM – 3.40 PM - Meeting Room 303

IPS-286: Causal Inference
Organiser: *Marloes Maathuis*
Chair: *Valérie Chavez*

Causal inference with confounders missing not at random
Linbo Wang, Department of Epidemiology, Harvard School of Public Health, USA

Causal inference and the data fusion problem
Elias Bareinboim, Purdue University, USA

Robust estimation of causal effects under data combination using instrumental variables
BaoLuo Sun, National University of Singapore

D3.10
2.00 PM – 3.40 PM - Meeting Room 304

STS-2553: Statistics and Religion
Organiser & Chair: *Ibrahim Mohamed*
Discussants: *Azami Zaharim, Rahmatullah Imon*

Integration of Islamic / religious ethical values in the Statistical Profession
Jamil Osman, International Islamic University of Malaysia

D3.11
2.00 PM – 3.40 PM - Meeting Room 305

IPS-175: Methodological Development of Global SDG Indicators
Organiser: *Christine Mayer*
Chair: *Christine Wirtz*
Discussant: *Maciej Truszczynski*

Validation of methods and data for SDG indicators
Pietro Gennari, Food and Agriculture Organization (FAO), Italy

Methodological developments related to SDG health indicators
Khondkar Rifat Hossain, World Health Organization (WHO), USA

Coupling national data with global modelling to monitor the environmental dimension of the SDGs
Arman Bidarbakhtnia, United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP), USA

D3.13
2.00 PM – 3.40 PM - Meeting Room 401

STS-520: Big Data Application Perspective in Official Statistics
Organiser & Discussant: *Wan Mohd Shahrulnizam Wan Mohd Najuri*
Chair: *Riyanti Saari*

Statistical analysis versus predictive analytics
Fareza Mohamed Sani, Department of Statistics Malaysia

Official Statistics & Big Data Processing Capacity Indicators for Public-Sector Organizations
Syed Wasim Abbas, National College of Business Administration & Economics, Lahore, Pakistan

Research on method of population prediction by Big Data from mobile phones
Mingcui Du, Beijing Municipal Bureau of Statistics, China

D3.14
2.00 PM – 3.40 PM - Meeting Room 402

STS-407: The Agricultural Census as a Component of an Integrated Statistical System
Organiser & Chair: *Jairo Castano*

Integrating agricultural censuses and surveys for optimal sectoral data collection
Jairo Castano, Food and Agriculture Organization (FAO), Italy

The Philippine Census of Agriculture and Fisheries as part of the Integrated Agricultural Statistical System
Minerva Esquivias Eloisa, Philippine Statistics Authority

The integration of the Census of Agriculture with the Business Statistics Program: The keystone for the next generation of Censuses in Canada
Eric Rancourt, Statistics Canada

D3.15
2.00 PM – 3.40 PM - Meeting Room 403

STS-466: Intelligent Data Warehouse Enrich Smart Statistics
Organiser: *Rosnah Muhamad Ali*
Chair: *Siti Haslinda Mohd Din*

Leveraging intelligent data warehouse for a seamless statistics
Rosnah Muhamad Ali, Department of Statistics Malaysia

Managing unstructured data through Big Data analytics towards intelligent insights
Sasongko Yudho, EBDESK, Indonesia

Myharmony: Generating statistics from clinical text for monitoring Clinical Quality Indicators
Md. Khadzir Sheikh Ahmad, Ministry of Health, Malaysia

D3.16
2.00 PM – 3.40 PM - Meeting Room 404

STS-507: Rising to the Challenges of a Changing Official Statistics World
Organiser & Chair: *Vince Galvin*

Adding statistical value in a rapidly changing government data "Eco-System"
Vince Galvin, Statistics New Zealand

Methodology leadership and positioning on a modernisation journey
Frauke Kreuter, University of Maryland, USA

Challenges in implementing a new imputation method into production in the 2017 Economic Census or what to do when the research approach oversimplifies the problem
Katherine Jenny Thompson, US Census Bureau

The key ingredients for Africa to leap frog and produce next generation statistics
Rafik Mahjoubi, African Development Bank

D3.17
2.00 PM – 3.40 PM - Meeting Room 405

STS-558: Development of End-To-End Integrated Solution for Statistical Reporting: Opportunities and Challenges
Organiser: *Alex Chin Thiam Khor*
Chair: *Kenny Lai*

The integrated data submission/collection platform for regulator and statistical community
Alex Chin Thiam Khor, Ocean Bridge Sdn Bhd, Malaysia

Data Analytics Platform for Both XBRL & Non XBRL Content
Chin Kuan Low, Infoscape Sdn Bhd, Malaysia

Handshakes Corporate Intellegence Platform
Joleen Yoong, Handshakes Technology (M) Sdn Bhd, Malaysia

Capability maturity model for data collection
Daniel Bromley, CoreFiling Limited, UK

The Data Model - Powering data collection and submission in Central Banks
Philip Allen, CoreFiling Limited, UK

D3.18
2.00 PM – 3.40 PM - Meeting Room 406

STS-429: Green Economy and Green Jobs: Tourism Sustainability and the Issue of Measurement
Organiser & Chair: *Igor Chernyshev*

Green economy: A conceptual overview
Margarita Rohr, University of Valencia, Spain

Greening with jobs
Catherine Saget, ILO, Thailand

Statistical definition of employment in the environmental sector and green jobs: Theory and practice
Valentina Stoevska, ILO, *Thailand*

Sustainable grassroots tourism through green jobs: Measurement issues
Florabela Carausu, Gopa Luxembourg S.A.R.L

D3.19
2.00 PM – 3.40 PM - Meeting Room 407

STS-430: Recent Advances in Functional and High Dimensional Statistical Methods
Organiser & Chair: *Anirvan Chakraborty*

What is the dimension of a stochastic process?
Anirvan Chakraborty, Iiser Kolkata, India

Distribution's template estimate with Wasserstein metrics
Jean-Michel Loubes, Institut de Mathematiques de Toulouse, France

A multiplier bootstrap approach to one-way ANOVA for functional data
Zhenhua Lin, University of California, USA

Perfect clustering of high dimensional data
Anil K. Ghosh, Indian Statistical Institute

D3.20
2.00 PM – 3.40 PM - Meeting Room 408

CPS-20: Applications of Statistics: Environment
Chair: *Rossita Mohamad Yunus*

CPS1289: Assessing the intended nationally determined contributions of BASIC's Emissions under the perspective of historical equity
Yong Wang, Dongbei University of Finance and Economics, China

CPS1834: Rainfall data modeling by SARIMA based on Hijriya calendar
Gumgum Darmawan, Gadjah Mada University, Indonesia

CPS1853: Panel data Regression Modelling of economic impact on environmental quality: The case of Indonesia
M Irsyad Ilham, Badan Pusat Statistik Indonesia

CPS1994: Improving energy access for Africa through regional integration
Xuan Che, United Nations Statistics Division (UNSD), USA

CPS2016: Spatial Multivariate Outlier Detection in the water quality of Klang river basin, Malaysia
Nur Fatihah Mohd Ali, University of Malaya

CPS2019: Comparing rainfall curves between climatological regions using functional analysis of variance
Shariffah Suhaila Syed Jamaludin, Universiti Teknologi Malaysia

D3.21
2.00 PM – 3.40 PM - Meeting Room 409

CPS-21: Statistical Finance
Chair: *Wong Sen Min*

CPS1297: High frequency value-at-risk analysis: An empirical study for IPC Mexican Index
Chin Wen Cheong, Xiamen University Malaysia

CPS1863: Portfolio selection using cluster analysis and fast minimum covariance determinant estimation method
La Gubu, Gadjah Mada University, Indonesia

CPS1971: Regional financial inclusion in Sumatera
Wahyu Dewati, Bank Indonesia

CPS2086: Modeling the volatility of Rupiah exchange rate against USD and its determinants
Fauzan Jodie Aldrian, Bureau of Statistics Central Halmahera Regency, Indonesia

CPS2129: Longitudinal analysis of financial ratios and Economic Indicators of Italian firms in the period 2008-2017
Matilde Bini, European University of Rome, Italy

CPS2245: The impact of financial sector master plan on cost efficiency of Malaysian banks: An analysis of Stochastic Frontier Analysis
Azrie Tamjis, Bank Negara Malaysia

D3.22
2.00 PM – 3.40 PM - Meeting Room 410

CPS-23: Applications of Statistics: Public Health
Chair: *Nurulkamal Masseran*

CPS1879: Age-adjustment or direct standardization to compare indicators disaggregated by disability status
Zineb El Ouazzani Touhami, High Commission for Planning, Morocco

CPS1262: Field interviewer effects on the quality of malaria diagnosis in Malawi
Ngianga Ii Kandala, School of Public Health Kinshasa, Congo

CPS1496: Model ensembles with different response variables for base and meta models: Malaria disaggregation regression combining prevalence and incidence data
Tim Christopher David Lucas, University of Oxford, UK

CPS1899: Investigating drug use among Filipino youth
Ira Joy Hernandez Martin, University of the Philippines

CPS2003: Structured additive regression modeling of Pulmonary Tuberculosis infection
Bruno De Sousa, University of Coimbra, Portugal

CPS689: Examining inequality of opportunity in the use of maternal and reproductive health interventions in Sierra Leone
Appunni Sathiya Susuman, University of the Western Cape, South Africa

E3.03
4.00 PM – 5.40 PM - Conference Hall 1

IPS-184: Analytical Use and Applications of Financial Accounts and Macroeconomic Balance Sheets
Organiser: *Bruno Tissot*
Chair: *Andrea Silke Stapel-Weber*

The financial behavior of the non-financial sectors in the Euro area: A historical perspective
Pierre Sola, European Central Bank, Germany

Distributional financial accounts
Susan Hume McIntosh, Board of Governors of the Federal Reserve System, USA

The French Households' portfolio: An appraisal using the financial almost ideal demand system
Christian Pfister, Bank of France

International comparison of the BIS International Banking Statistics: Estimates of the positions excluding trustee business
Kimiaki Shinozaki, Bank of Japan

From-Whom-To-Whom matrices: Analysis of the sectoral interlinkages in Chile
Ivette Fernández, Central Bank of Chile

E3.02
4.00 PM – 5.40 PM - Banquet Hall

STS-515: Training Data Scientists at University for Rewarding Careers
Organiser & Chair: *John Harraway*

Looking back, looking forward – Statistics and the data science tsunami
Jim Ridgway, Smart Centre Durham University, UK

Data Science Programmes: Is there an ideal design?
Jeremiah Deng, University of Otago, New Zealand

Evolving statistics education for a data science world
Sotirios Damouras, University of Toronto, Canada

Teaching data science – A user perspective
Stephen MacFeely, United Nation Conference for Trade and Development, Switzerland

E3.04
4.00 PM – 5.40 PM - Conference Hall 2

STS-559: Pre-Emptive Strike against Money Laundering and Terrorist Financing Using Big Data Analytics and Artificial Intelligence
Organiser: *Xiang Lee*
Chair: *Mohd Faizal Abdullah*

Data analytics applications from regulator's point of view
Claudio Colasante, Austrac, Australia

Graph based predictive analytics for anomaly detection in payment systems
Kimmo Soramäki, Financial Network Analytics (FNA) Ltd, UK

Data analytics by MasterCard to counter ML/TF risk
David Rich, Vocalink, UK

E3.05
4.00 PM – 5.40 PM - Conference Hall 3

STS-557: Applying Quantitative Techniques to Develop Optimal Investment Strategies for Insurers
Organiser & Chair: *David Roseburgh*

Optimal security selection under regulatory constraints
David Roseburgh, Aberdeen Standard Investments, UK

Portfolio optimization for insurers under risk based capital regimes
Ouaile El Fetouhi, Aberdeen Standard Investments, UK

A light stochastic Asset Liability Management (ALM) for Strategic Asset Allocation (SAA)
Paul Manson, Moody's Analytics, USA

E3.06
4.00 PM – 5.40 PM - Plenary Theatre Auditorium

STS-637: National Statistical Offices in the Data Science Era
Organiser: *Mohamed Ismail*
Chair: *Ghada Mostafa Abdalla*
Discussant: *Hussein Sayed Abdel Aziz*

Statistics Monopoly: No room for nostalgia
Magued Osman, Cairo University, Egypt

Using Big Data in monitoring indicators of Sustainable Development Goals in Egypt
Reem Mohamed El-Sebaay, Central Agency for Public Mobilization and Statistics. Egypt

UN global platform as a data science collaboration environment for official statistics
Ronald Jansen, United Nations Statistics Division (UNSD), USA

E3.08
4.00 PM – 5.40 PM - Meeting Room 302

STS-544: Nowcasting and Forecasting of Macroeconomic Variables: Role of Indicators and Real-Time Data
Organiser: *Baoline Chen*
Chair: *Kyle Hood*

Nowcasting advance estimates of private consumption of services in the US National Accounts: General Bridge Equation and bridging with Factor Framework
Baoline Chen, US Bureau of Economic Analysis

Nowcasting Finnish Real Economic Activity: A Machine Learning Approach
Paolo Fornaro, The Research Institute of the Finnish Economy, Finland

Forecasting quarterly GDP at real-time monthly intervals using Bayesian Linear Least-Squares Methods
A. Zadrozny, US Bureau of Labor Statistics

Nowcasting and forecasting with Dynamic Factors Models: Some experiences and lessons
Rafael Doménech, BBVA Research & University of Valencia, Spain

E3.09
4.00 PM – 5.40 PM - Meeting Room 303

STS-518: Classical and Nonclassical Infinite Divisibility, Their Analysis and Applications: Part 2
Organiser & Chair: *Victor Perez Abreu*

Free infinitely divisible probability measures – Properties and main examples
Steen Thorbjørnsen, Aarhus University, Denmark

Infinitely divisible probability measures under generalized convolutions
Barbara Helena Jasiulis-Goldyn, University of Wroclaw, Poland

Cumulants in Finite Free Probability
Octavio Arizmendi, Center for Research in Mathematics, Mexico

E3.10
4.00 PM – 5.40 PM - Meeting Room 304

CPS-24: Applications of Statistics: Business and Economics
Chair: *Muhamad Safiih Lola*

CPS877: The evolution of the OECD countries after the 2008 financial crisis
Paulo Jorge Gomes, Nova University Lisbon, Portugal

CPS1198: Hedonic modeling and Brownian index: Case of Morocco
Firano Zakaria, University Mohammed 5 Rabat, Morocco

CPS1353: Inclusive economic growth in JAVA
Valent Gigih Saputri, Badan Pusat Statistik Indonesia

CPS1358: Bivariate Archimedean Copula model: An application to Customer Price Index (CPI) and Wholesale Price Index (WPI) in Indonesia
Titi Kanti Lestari, Badan Pusat Statistik Indonesia

CPS1849: The monetary value of unpaid family work in Egypt by regions
Shaymaa Wael Rabie, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS2509: Modelling volatility with outlier detection in asymmetric GARCH (p, q) models on JSE index
Lesego Dorothy Sepato, North West University, South Africa

E3.11
4.00 PM – 5.40 PM - Meeting Room 305

CPS-25: Applications of Statistics: Medical
Chair: *Rossita Mohamad Yunus*

CPS1376: Optimal sample size allocation: An investigation for evaluating the behavior of a dietetic supplement
Gajendra K. Vishwakarma, Indian Institute of Technology Dhanbad

CPS1871: Bayesian conditional autoregressive model for mapping human immunodeficiency virus incidence in the National Capital Region of the Philippines
Shirlee Ocampo, De La Salle University, Philippines

CPS1944: Time-lagged variables and incidence of pneumonia in wet-dry tropical North Australia
Oyelola A. Adegboye, Australian Institute of Tropical Health and Medicine, James Cook University

CPS2131: Deep learning the MCA dot sign of Acute Ischemic stroke on non-contrast CT images
Philip L.H. Yu, The University of Hong Kong

CPS2174: Logistic model averaging for predicting type of tumor in high dimensional data: A randomize approach
Septian Rahardiantoro, Department of Statistics IPB University, Indonesia

CPS2233: A hierarchical mixed effects model for batch cytometry data
Sharon Lee, University of Adelaide, Australia

E3.12
4.00 PM – 5.40 PM - Meeting Room 306

CPS-26: Data Science
Chair: *Liong Choong Yeun*

CPS2201: Generalized active learning and design of statistical experiments for manifold - Valued data
Mikhail Langovoy, EPFL Lausanne, Switzerland

CPS1356: Childhood under nutrition in Bangladesh: A policy - Suggestive empirical analysis
Mohaimen Mansur, University of Dhaka, Bangladesh

CPS1915: Neural networks with different activation functions applied in bank telemarketing
Han Gao, Universiti Sains Malaysia

CPS1934: Prediction of daily respiratory tract infection episodes from prescription data
Atikur R. Khan, Gulf University for Science and Technology, Kuwait

CPS1946: Assessment of condominium occupancy rate in Bangkok and its vicinity from electricity meter data analytics
Jittima Dummee, Bank of Thailand

E3.13
4.00 PM – 5.40 PM - Meeting Room 401

CPS-04: Statistical Education
Chair: *Mohd Ridauddin Masud*

CPS694: A critical image of statistical analyses in medicine between 2006 and 2018
Michal Ordak, Medical University of Warsaw, Poland

CPS1922: Errors of the fourth kind-- A click away...Key lies in statistical collaboration
Imran Khan, SK University of Agricultural Sciences and Technology of Kashmir, India

CPS2079: Improving statistical literacy in Albania, the role of the National Statistical Institute
Klajd Shuka, Institute of Statistics Albania (INSTAT)

CPS2282: Modernization in Statistical Training Management System
Wan Azhar Wan Mokhtar, Department of Statistics Malaysia

CPS1178: Statistics Education in Indian Agricultural Universities and Agro-Technical Institutes
D S Hooda, Honorary Professor in Mathematics, India

E3.14
4.00 PM – 5.40 PM - Meeting Room 402

CPS-12: Bayesian
Chair: *Mohd Bakri Adam*

CPS1212: Compas: A Bayesian drug combination platform trial design with adaptive shrinkage
Ying Yuan, University of Texas MD Anderson Cancer Center, USA

CPS1379: A Bayesian quantile time series model for asset returns
Gelly Mitrodima, LSE, UK

CPS1488: EP-IS: Combining expectation propagation and importance sampling for Bayesian nonlinear inverse problems
Willem van den Boom, National University of Singapore

CPS1875: Bayesian spatio-temporal model for data integration with application to multiple air pollutants
Chiara Forlani, Imperial College London, UK

CPS1916: Bayesian measurement error models in air pollution and health studies
Erica Ponzi, University of Zurich, Switzerland

E3.15
4.00 PM – 5.40 PM - Meeting Room 403

CPS-03: Robust Statistics
Chair: *Habshah Midi*

CPS1350: Compound criteria and breakdown numbers
Mahbub A.H.M. Latif, University of Dhaka, Bangladesh

CPS1857: Land-use change detection using least median of squares regression
Nicholas Jovianto, Tarumanagara University, Indonesia

CPS2071: Robust estimation of treatment effects in a latent-variable framework
Mikhail Zhelonkin, Erasmus University Rotterdam, Netherlands

CPS2207: Application of residual estimators in detecting outliers and potential influential observations in structural equation modelling: QQ plots approach
Abdul-Aziz Abdul-Rahaman, Kumasi Technical University, Ghana

CPS2222: Nu-support vector regression for the identification of outliers in high dimensional data
Abdullah Mohammed Rashid, Universiti Putra Malaysia

CPS2224: The robustness of two step estimation against heteroskedasticity and outliers in panel data
Nor Mazlina Abu Bakar, Universiti Sultan Zainal Abidin, Malaysia

E3.16
4.00 PM – 5.40 PM - Meeting Room 404

CPS-11: Social
Chair: *You Huay Woon*

CPS1236: Poverty profile for the upper east region of Ghana
Dioggban Jakperik, University for Development Studies, Ghana

CPS1341: Short-distance and long-distance elderly migration in Indonesia year 2016: Application of Multilevel Logistic Regression Analysis
Kadek Swarniati, Badan Pusat Statistik Indonesia

CPS2072: A new additive index number system with maximum characteristicity for International Price Comparisons
Chang Xie, Dongbei University of Finance and Economics, China

CPS2119: A comparison of ordinal regression in an analysis of factors associated with family well-being
Noor Azlin Muhammad Sapri, National Population and Family Development Board, Malaysia

CPS2190: Assessing life quality in high density environments Cairo (Egypt) case study
Mostafa Mohamed Salah, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS2192: Fuzzy individual and global assessments and FANOVA. Application: Fuzzy measure of poverty with Swiss data
Laurent Donzé, Asam, University of Fribourg, Switzerland

E3.17
4.00 PM – 5.40 PM - Meeting Room 405

CPS-05: Applications of Statistics: Actuarial Science
Chair: *Mohd Azmi Haron*

CPS811: A hybrid log-poisson model for optimal loss reserves in insurance
Woundjiague Apollinaire, National Advanced School of Engineering-UMA, Cameroon

CPS1283: Application of Generalised Linear Models during the phased liberalisation of the Malaysian motor and fire tariffs
Kelvin, Chee Yun Hii, MSIG Insurance (Malaysia) Bhd

CPS1423: Random sums and application to the probability ruin problem in actuarial science
Rachel Nancy Njie, Ministry of Basic and Secondary Education, Gambia

CPS1872: The semi-separating equilibrium of two-stage insurance under Bertrand competition and adverse selection
Cong Li, Qingdao University, China

CPS2059: The impact of applying 5%VAT in the UAE
Aysha Ali Al Hosni, Statistics Centre Abu Dhabi, UAE

E3.18
4.00 PM – 5.40 PM - Meeting Room 406

CPS-32: Statistical Theory and Methodology
Chair: *Dharini Pathmanathan*

CPS1085: Inference on P(X<Y) for Bivariate Normal Distribution based on Censored Data
Manoj Chacko, University of Kerala, India

CPS1443: Adaptive estimators for noisily observed diffusion processes
Shogo H Nakakita, Osaka University, Japan

CPS1461: Changepoints in dependent and heteroscedastic panel data
Matúš Maciak, Charles University, Czech Republic

CPS1854: Robust estimation and joint selection in Linear Mixed Models
Shonosuke Sugasawa, The University of Tokyo, Japan

CPS2085: Competing risk analysis of lifetime data using Inverse Maxwell Distribution
Mahaveer Singh Panwar, Banaras Hindu University, India

E3.19
4.00 PM – 5.40 PM - Meeting Room 407

CPS-33: Statistical Theory and Methodology
Chair: *Roslawati Yahya*

CPS1349: A solution to separation in Poisson regression for small or sparse count data
Momenul Haque Mondol, University of Barishal, Bangladesh

CPS1419: A multi-state model for analyzing doubly interval-censored semi-competing risks data
Jinheum Kim, University of Suwon, Korea

CPS1877: Modelling spatio-temporal extremal dependencies for hourly precipitations in Southern France
Gwladys Toulemonde, Montpellier University, France

CPS1878: Modelling randomization with misspecification of the correlation structure and distribution of random effects in a Poisson mixed model
Zakir Hossain, University of Dhaka, Bangladesh

CPS2203: Model selection for binary variables clustering
Thierry Dumont, Université Paris Nanterre, France

E3.20
4.00 PM – 5.40 PM - Meeting Room 408

CPS-06: Applications of Statistics: Agriculture
Chair: *Muhamad Hamizan Abdullah*

CPS863: Redesigning of the corn production survey in the Philippines
Melanie Castillo Estrada, Philippine Statistics Authority

CPS1268: Analysis of covariance: A case study of oil palm experimental data with repeated measures
Kennedy Irikefe Ekerikevwe, Delta State Polytechnic, Nigeria

CPS1399: Agricultural statistics: Capturing food crop harvested area through interview
Ratna Rizki Amalia, Badan Pusat Statistik Indonesia

CPS2002: The impact of weather risk on the estimation of yield-based agricultural losses and value at risk using Copula models
Atina Ahdika, Gadjah Mada University, Indonesia

CPS2081: Composite indicator of food insufficiency
Lalla Amal Mansouri, High Commission for Planning, Morocco

CPS2180: Effects of hydro-agricultural dams on agricultural income of farmers: Evidence from Sologo, Solomougou and Tchaloni dams?
Lao Kenao, Ministry of Agriculture, Togo

E3.21
4.00 PM – 5.40 PM - Meeting Room 409

CPS-35: Survey Sampling
Chair: *Jayanthi Arasan*

CPS1416: A study on the parameter estimation of the generalized ratio-type estimator in survey sampling
Jungtaek Oh, Hankuk University of Foreign Studies, Korea

CPS1437: Formulating sample weight calibration as an optimisation problem solved using linear programming techniques
Thanyani Alpheus Maremba, Statistics South Africa

CPS1447: Developing novice students' initial conception of sample
Russasmita Sri Padmi, SEAMEQ QITEP in Mathematics, Indonesia

CPS1860: A case study on adaptive Web Sampling Survey of small scale industries
Yi Li, Shanxi Univeristy of Finance & Economics, China

CPS1990: A new type of principal components calibration in survey sampling
Muhammad Ahmed Shehzad, Bahauddin Zakariya University Multan, Pakistan

E3.22
4.00 PM – 5.40 PM - Meeting Room 410

CPS-36: Official Statistics: Labor
Chair: *Noraliza Mohamad Ali*

CPS798: Annualization of the labor force survey in the Philippines
Sarah Buhi-on Balagbis, Philippine Statistics Authority

CPS1431: The determining factors of NEET status in Morocco: From a gender-approach towards a new indicator
Salima Mansouri, High Commission for Planning, Morocco

CPS1809: Preschool attendance and its effects on the educational success on employment and wages
Naima Labroude, High Commission for Planning, Morocco

CPS1998: Individual's probability to enter the Jordanian labor market and its social and demographic variations. Case study: Labor Force Survey data, Jordan; 2017
Eman Saleh Bnymfarej, Department of Statistics of Jordan

CPS2132: Computing employment multipliers in the context of Malaysian economy
Akmalia Hanifah, Department of Statistics Malaysia

CPS2214: Female labour force participation: Where are we
Nur Layali Mohd Ali Khan, Department of Statistics Malaysia

22nd August 2019 (Thursday)

Updated as at 17th August 2019

A4.00
8.50 AM – 10.00 AM - Plenary Hall

SIPS-111: Environmetrics Journal Invited Paper Session
Organiser: *Walter Piegorsh*
Chair: *Noel Cressie*

Remote effects spatial process models for modeling teleconnections
Joshua Hewitt, Colorado State University, USA

A4.01
8.50 AM – 10.00 AM - Ballroom 2

SIPS-360: IAOS Journal Lecture
Organiser: *Kirsten West*
Chair: *Sam Notzon*
Discussant: *Bridget Robson*

JIAOS special edition on measuring indigenous identification - next steps
Michele Connolly, International Group on Indigenous Health Measurements, Australia

Update on IAOS working group on international indigenous statistics
Richard Madden, University of Sydney, Australia

A4.02
8.50 AM – 10.00 AM - Banquet Hall

SIPS-372: Statistics Education Research Journal Session
Organiser: *Manfred Borovnick*
Chair: *David Stern*
Discussant: *Ayse Aysin Bombaci Bilgin*

My experience as editor-in-chief of a journal
Fabrizio Ruggeri, Italian National Research Council Milano

Panellists:
- *Manfred Borovnick, University of Klagenfurt, Austria*
- *Theodosia Prodromou, University of New England*

A4.03
8.50 AM – 10.00 AM - Conference Hall 1

SIPS-1311: Mahalanobis Prize Lecture
Organiser & Chair: *Helen MacGillivray*
Discussants: *Márcia Branco, Marc G. Genton*

Some formulations of flexible statistical models
Reinaldo Boris Arellano Valle, Pontificia Universidad Católica de Chile

A4.04
8.50 AM – 10.00 AM - Conference Hall 2

SIPS-356: Bernoulli Society President Lecture
Organiser: *Mark Podolskij*
Chair: *Susan Murphy*

On beneficial ways to combine clustering and hypothesis testing
Michael Newton, University of Wisconsin-Madison, USA

A4.05
8.50 AM – 10.00 AM - Conference Hall 3

SIPS-2338: Host Country Malaysia Invited Papers Session 1: Internationalisation of Statistical Networking in Developing Countries: Opportunities and Challenges
Organiser: *Ibrahim Mohamed*
Chair: *Kamarulzaman Ibrahim*

Developing statistical networks and specialists communities in developing countries
Nor Aishah Hamzah, University of Malaya

Promotion of statistical research and engagement in developing countries – Role of international and regional organisation
Shahjahan Khan, Organization University of Southern Queensland, Australia

Developing statistics in developing countries
Sophie Dabo-Niang, University of Charles de Gaulle, Lille 3, France

B4.00
10.30 AM – 12.30 PM - Plenary Hall

SIPS-2241: Early Career Awards
Organiser: *Helen MacGillivray*
Chair: *Gemma Van Halderen*

Fusing multiple existing space-time categorical land cover datasets to model dissolved organic matter
Amanda S. Hering, (TIES Abdel El-Sharaawi Early Investigator Award), Baylor University, Waco, Texas, USA

Detecting geographical differencing problems in the context of spatial data dissemination
Vianney Costemalle (IAOS YS Award), French National Institute of Statistics and Economic Studies

Using predicted response propensity scores with the random forests method to direct a responsive intensive follow up strategy
Summer Wang (ABS Ys Winners), Australian Bureau of Statistics

B4.01
10.30 AM – 12.30 PM - Ballroom 2

SIPS-182: IASS Journal and Cochran-Hansen Prize Invited Session
Organiser: *Risto Lehtonen*
Chair: *Peter Lynn*
Discussant: *Pedro Luis Do Nascimento Silva*

Supplementing small probability samples with nonprobability samples: A Bayesian approach
Diego Andres Perez Ruiz, University of Manchester, UK

International program in survey and data science: An environment for training and cooperation
Frauke Kreuter, University of Maryland & University of Mannheim, Germany

B4.03
10.30 AM – 12.30 PM - Conference Hall 1

IPS-131: Violence Against Women
Organiser & Chair: *Adrián Franco Barrios*
Discussants: *Luis Rivera Galicia, Adrián Franco*

The integrated system on VAW in Italy: measuring, communicating and using VAW data
Maria Giuseppina Muratore, Italian National Institute for Statistics (ISTAT)

How to measure shelters and specialized services to support victims of violence
Roberta Crialesi, Italian National Institute for Statistics (ISTAT)

B4.04
10.30 AM – 12.30 PM - Conference Hall 2

IPS-98: Statistician's Contribution to the Currently Discussed Data Fusion Technologies
Organiser & Chair: *Michael G. Schimek*

Research synthesis of rare count outcome data arising from several sources
Dankmar Boehning, University of Southampton, UK

Data integration of unbalanced social media and survey information via calibration
Luciana Dalla Valle, Plymouth University, UK

Nonparametric mean estimation for big-but-biased data
Ricardo José Cao Abad, Universidade da Coruña, Spain

Integrative big data models for precision medicine
Veera Baladandayuthapani, University of Michigan, USA

B4.05
10.30 AM – 12.30 PM - Conference Hall 3

IPS-242: Ethics of Data Communication
Organiser: *Regina Nuzzo*
Chair: *Liberty Vittert*
Discussants: *Regina Nuzzo, Andreas Vasilios Georgiou*

Communicating controversial results to the public
Jessica Utts, University of California – Irvine, USA

The view from inside the newsroom
Robert Cuffe, BBC, UK

Panellists:
- *Andreas Vasilios Georgiou, Amherst College, USA*

B4.06
10.30 AM – 12.30 PM - Plenary Theatre Auditorium

IPS-224: Governance Models and Their Impact on Quality in Statistical Systems
Organiser: *Eduardo Barredo Capelot*
Chair: *Mariana Kotzeva*

Quality statistics as a trusted source of Information
Nicola Shearman, UK Statistics Authority

Organization of statistical agencies in the United States
Wendy L Martinez, U.S Bureau of Labor Statistics

Governance models and their impact on quality in the statistical system
Klajd Shuka, Institute of Statistics Albania (INSTAT)

The balance between governance support needed and influence avoided; The case of population censuses in developing countries
Jean Michel Durr, INSEE, France

B4.07
10.30 AM – 12.30 PM - Meeting Room 301

IPS-214: Statistical Inference and Methods for Emerging Manifold Data
Organiser & Chair: *Seng Huat Ong*

Universal and efficient tests for analysis of mean direction vectors
Ashis Sengupta, Indian Statisticai Institute

Statistical methods for differentially methylated regions
Varghese George, Augusta University, USA

Application of Feller's Lemma for non-parametric density estimation: The case of directional data
Yogendra P. Chaubey, Concordia University, Canada

Möbius transformation and a Cauchy family on the sphere
Shogo Kato, Institute of Statistical Mathematics, Tokyo, Japan

Generating function based estimation for a family of circular distributions
Choung Min Ng, Institute of Mathematical Sciences, University of Malaya

Sine-correlated distribution on the torus
Tomoaki Imoto, University of Shizuoka, Japan

B4.08
10.30 AM – 12.30 PM - Meeting Room 302

IPS-135: Significance of Ranked Set Sampling and Adaptive Cluster Sampling Designs
Organiser & Chair: *Girish Chandra*
Discussants: *Raman Nautiyal, Raosaheb Latpate*

Unbalanced ranked set sampling in cluster randomized studies
Johan Lim, Seoul National University, South Korea

Improved nonparametric estimation using partially ordered sets
Xinlei (Sherry) Wang, Department of Statistical Science, Southern Methodist University, USA

Ranked set sampling in survival analysis
Min Chen, University of Texas, Dallas

Two stage adaptive cluster sampling based on ordered statistics
Neeraj Tiwari, Kumaun University, India

B4.09
10.30 AM – 12.30 PM - Meeting Room 303

IPS-295: How to Scale Up Statistical Analysis Capacity to Achieve the Sustainable Development Goals
Organiser: *Eric Vance*
Chair: *Marcus Nunes*
Discussant: *Bhaswati Ganguli*

How the LISA 2020 program is scaling up statistical analysis capacity
Eric Vance, LISA-University of Colorado Boulder, USA

Challenges in statistics in developing countries and the opportunities for statisticians to solve development challenges and achieve the sustainable development goals
Demisew Gebru Degefu, Hawassa University, Ethiopia

Scaling up statistical analysis capacity to achieve the sustainable agricultural development goals in Tanzania: Evidence from Sokoine University of Agriculture Laboratory for Interdisplinary Statistical Analysis (SUALISA)
Emanuel Msemo, Sokoine University of Agriculture Laboratory for Interdisciplinary Statistical Analysis, Tanzania

University of Zimbabwe Laboratory for Interdisciplinary Statistical Analysis (UZLISA): A vital tool for sustainable development in Zimbabwe
Lillian Siziba, University of Zimbabwe Laboratory for Interdisciplinary Statistical Analysis

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B4.10
10.30 AM – 12.30 PM - Meeting Room 304

IPS-195: The System of National Accounts (SNA): Past Experiences and Future Challenges
Organiser & Chair: *Andrew Sharpe*

It's about time for a change: Broadening the SNA framework to account for sustainability and well-being
Peter Vandeven, Organisation for Economic Co-operation and Development (OECD), France

Broadening the scope of GDP – A stocktaking on including ecological developments and other basic conceptual amendments
Albert Braakmann, Federal Statistical Office of Germany

Implementing globalization in national accounts: practical steps in Europe
Silke Stapel-Weber, European Central Bank, Germany

The next generation of international statistical standards
Gabriel Quiros-Romero, International Monetary Fund, USA

B4.11
10.30 AM – 12.30 PM - Meeting Room 305

IPS-273: Coclustering: Model Based or Model Free Approaches?
Organiser & Chair: *Christophe Biernacki*
Discussant: *Christine Keribin*

Some recent developments in the analysis of bipartite networks
Nial Friel, University College Dubin, Ireland

Multiple co-clustering with heterogenous marginal distributions and its application to identify subtypes of depressive disorder
Tomoki Tokuda, Okinawa Institute of Science and Technology Graduate University, Japan

Co-clustering through rank-one approximation
Charlotte Laclau, Université Grenoble Alpes, France

B4.12
10.30 AM – 12.30 PM - Meeting Room 306

IPS-55: Official Statistics and Parliaments
Organiser & Discussant: *Jean-Louis Bodin*
Chair: *John Pullinger*

Official statistics and parliaments' role on independence of NSOs: Latin America
Enrique De Alba Guerra, National Institute of Statistics and Geographical Information (INEGI)

US Congress, Statistical System, Fundamental Principles - How Does It Work
Misha Belkindas, World Bank, USA

Parliament and official statistics in a multinational context: An EU Perspective
Lukasz Augustyniak, Eurostat

B4.13
10.30 AM – 12.30 PM - Meeting Room 401

IPS-291: Statistical Simulation and Computation in Research
Organiser & Chair: *Ibrahim Mohamed*
Discussant: *Azami Zaharim*

Forecasting financial market volatility using a dynamic topic model
Yoshinori Kawasaki, Institute of Statistical Mathematics, Tokyo, Japan

Quadratic estimating functions for Nbingarch model
Nurul Najihah Mohamad, International Islamic University of Malaysia

Model selection based on value-at-risk backtests approach for Garch-type models
You Beng Koh, University of Malaya

Outlier detection in 2×2 crossover design using Bayesian framework
Lim Fong Peng, University Putra Malaysia

B4.14
10.30 AM – 12.30 PM - Meeting Room 402

IPS-213: The Future of Social Security Design Through Big Data Analytics
Organiser & Chair: *Punithaa Kylasapathy*

The Future of Data Analytics in Social Security Design
Amara Haqqani, Milliman, Australia

Longevity Protection
Torsten Franz, Hannover Re, Germany

B4.15
10.30 AM – 12.30 PM - Meeting Room 403

IPS-264: Intra-Country Comparisons of Poverty and Living Conditions: Influence Factors, Statistical Methods and Applications
Organiser: *Luigi Biggeri*
Chair: *Tiziana Laureti*
Discussant: *Monica Pratesi*

Pinpointing poverty in Europe: Using small-area estimation to inform policies
Kenneth Simler, World Bank, USA

Poverty lines or well-being: What do we really capture in ICP?
Eileen Capilit, United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP)

Definition, estimation and use of poverty line at Sub-National (Local) Level: Do local thresholds and prices make a difference?
Gaia Bertarelli, Università di Pisa, Italy

The impact of redistribution through taxes and deductions on the income distribution – A decomposition analysis with administrative tax data from Switzerland
Oliver Huembelin, Department of Social Sciences, University of Berne, Switzerland

B4.16
10.30 AM – 12.30 PM - Meeting Room 404

IPS-297: How Can Economic Statistics Address the Challenges Posed by Economic Globalisation?
Organiser: *John Verrinder*
Chair: *Christine Wirtz*

Sharing of data and information between countries as a precondition for internationally consistent economic statictics
Timo Koskimaki, Statistics Finland

Large case units as a tool to cover MNES in a consistent way in official statistics
Fred Demollin, Center for Big Data Statistics (CBS), Netherlands

The early-warning system
Laurent Olislager, European Commission, Luxembourg

B4.17
10.30 AM – 12.30 PM - Meeting Room 405

STS-551: On Some Applications of Bayesian Statistical Modeling
Organiser: *Adriana Irawati Nur Ibrahim*
Chair: *Nurulkamal Masseran*

Empirical Bayes method for modeling air pollution index
Kamarulzaman Ibrahim, Universiti Kebangsaan Malaysia

Estimating the proportion of unreported traffic accidents using bayesian poisson lognormal model with an adjusted mean
Zamira Hasanah Zamzuri, Universiti Kebangsaan Malaysia

Engineering applications of hierarchical Bayesian Modeling
Stephen Wu, Institute of Statistical Mathematics, Tokyo, Japan

Bayesian approach to errors-in-variables in poisson multiple regression model
Adriana Irawati Nur Ibrahim, University of Malaya

B4.18
10.30 AM – 12.30 PM - Meeting Room 406

STS-539: Statistical Process Monitoring in Twenty First Century
Organiser & Chair: *Amitava Mukherjee*

Application of the Tukey-ARIMA (Autoregressive Integrated Moving Average) control chart in monitoring the robotics pioneer data
Qurat-Ul-Ain Khaliq, Department of Statistics, Allama Iqbal Open University, Islamabad, Pakistan

Modeling and optimization of the SPRT control chart for individual observations
Chenglong Li, School of Management, Northwestern Polytechnical University, Xi'an, China

Exactly Distribution-Free Procedures for Phase-II Monitoring of High-Dimensional Processes
Amitava Mukherjee, XLRI - Xavier School of Management

An improved monitoring procedure of magnitude and frequency of events
Ridwan Adeyemi Sanusi, Department of Systems Engineering and Engineering Management, City University of Hong Kong, Kowloon

B4.19
10.30 AM – 12.30 PM - Meeting Room 407

STS-452: Input-Output Analysis
Organiser: *Norhayati Shuja'*
Chair: *Bee Wah Yap*

Input-output analysis of sectoral linkages using hypothetical extraction method - an application to Malaysia input-output tables
Norhayati Shuja', Department of Statistics Malaysia

Economic diversification and sustainable development - A new assessment with input-output data
Joerg Beutel, Konstanz University of Applied Sciences, Germany

Extended input-output model for demographic change – Preliminary application to the chinese urbanisation process
Nobuhiro Okamoto, Daito Bunka University, Japan

Using input-output tables to study trade and international production sharing arrangements
Mahinthan J. Mariasingham, Asian Development Bank, Philippines

The compilation and application of 2012 China multi-regional model
Yuan Jianqin, State Information Center, China

Value-added and trade-embodied carbon emission of China's industry with heterogeneity by firm size
Yang Cuihong, The Chinese Academy of Sciences, China

Inter-country input-output database for global demand projection model using demograhic assumptions
Norihiko Yamano, OECD Directorate for Science, Technology and Innovation, France

B4.20
10.30 AM – 12.30 PM - Meeting Room 408

STS-364: Methodology of Statistical Observation and Analysis of Informal Employment
Organiser: *Elena Zarova*
Chair: *Irina Eliseeva*
Discussants: *Paul Smelov, Elvira Dubravskaya*

Suggestions for improving the methodology for estimating informal employment based on a sample survey of the labour force
Sergey Musikhin, Analytical Centre by Government of Moscow, Russia

Comparative analysis of methodologies used for collecting data on formal and informal employment and tertiary education efficiency
Maria Frolova, Togliatti Academy of Management, Russia

Informal employment and employment in the informal sector in the Russian Federation
Konstantin Laykam, Federal State Statistics Service, Russia

Methods of Statistical Estimation of Informal Employment Based on the Integration of Various Data Sources
Polina Victorovna Kriuchkova, Moscow Government, Russia

Informal Employment and Sustainable Development Goals: Mutual Influence and Consistency of Indicators
Elena Zarova, Analytical Centre by Government of Moscow, Russia

B4.21
10.30 AM – 12.30 PM - Meeting Room 409

STS-419: Islamic Finance: Harnessing Data Analytics in Advancing Risksharing and Sustainable Finance
Organiser & Chair: *Hamim Syahrum Ahmad Mokhtar*
Discussant: *Azrie Tamjis*

Use of Big Data analytics in targeting right customers for sustainable and social finance (cash waqf)
Nurliza Mohd Mydin, Maybank Islamic, Malaysia

Investment account (risk sharing product) in Islamic banking: analysis of perceptions and behaviours of corporate & retail consumers using structural equation modeling
Zuraeda Ibrahim, University Technology MARA, Malaysia

Integrated ESG principles and Big Data analytics in selecting sustainable Islamic stocks
Omar Selim, Arabesque, UK

Prenatal care and neonate's birth weight in Egypt- An emphasis on model specification and empirical procedure
Embarika Farouk Mostafa, University of Aberdeen, UK

CE4.01
12.30 PM – 1.10 PM - Foyer Level 3 (East)

CPS2223-01: Malaysian economic indicator: How well does it provide signal on economic crisis?
Siti Nuraini Rusli, Department of Statistics Malaysia

CPS2256-02: If retail trade sales falls, will GDP follow? A case study of Malaysia
Norzarita Samsudin, Department of Statistics Malaysia

CPS2257-03: Poverty incidence in Kelantan State "Finding of Household Income Survey (HIS) Vs. E-Kasih"
Syamaizar Razali, Department of Statistics Malaysia

CPS2231-04: The impact of tourism industry on Consumer Price Index: The case of Melaka
Syafawati Abdul Refai, Department of Statistics Malaysia

CPS2138-05: Quantitative comparisons on Pioneer-Family Resilience Index Indonesia 2015
Rida Agustina, Badan Pusat Statistik, Indonesia

CPS2232-06: Underemployment: A review of methodology
Syafawati Abdul Refai, Department of Statistics Malaysia

CPS2139-07: Multidimensional poverty among women in Morocco- Overview and analysis of the dynamics between 2004 and 2014
Hicham El Marizgui, Haut-Commissariat Au Plan, Morocco

CPS2162-08: How trees can help to learn statistics
Rima Kregzdyte, Lithuanian University of Health Sciences

CPS2029-09: The impact of climate on tourism in the GCC
Amira Al-Salhi, GCC Statistical Center (GCC-Stat), Oman

CPS2144-10: Accuracy of tomographic Scan-Derived implant placement
Corrado Crocetta, University of Foggia, Italy

CPS2240-11: Multi-State models for progression of first stage of spontaneous labour
Gleici Castro Perdoná, Brazil

CPS2151-12: Estimating a panel data model with structural change and panel heterogeneity
Sarah Buhi-on Balagbis, Philippine Statistics Authority

CPS1108-13: Evaluation and comparison of patterns of maternal complications using generalized linear models of count data time series
Collins Ojwang Odhiambo, Strathmore University, Kenya

CPS1111-14: Statistical impact of merger and acquisition in a banking industry: A new generalized time series model
Varun Agiwal, Central University of Rajasthan, India

CPS2058-15: Export competitiveness of Sumatera coffee
Wahyu Dewati, Bank Indonesia

CW4.01
12.30 PM – 1.10 PM - Foyer Level 3 (West)

CPS2252-24: The impact of institutional quality and human ressources development on exports in West African Economic and Monetary Union (Waemu) countries
Zakaya Ramde, Professionnal Data Scientists Association of Burkina Faso (Prodasa), Burkina Faso

CPS2254-25: Improving middle school students' expectations of variability in a two-dimensional context
Dan Canada, Eastern Washington University, USA

CPS2204-26: On identification of influential observations in nonlinear regression models
Tatjana Von Rosen, Department of Statistics, Stockholm University, Sweden

CPS2184-27: Transmission network analysis of infectious disease in Portugal
Mohammad Lutfor Rahman, University of Dhaka, Bangladesh

CPS2270-28: Better statistical communication using data visualisation
Hamzah Ismail, Department of Statistics Malaysia

CPS1401-29: On the Unified Zero-Inflated Cure-Rate Survival models
Francisco Louzada-Neto, University of São Paulo, Brazil

CPS2187-30: Anchored Sem – Merging structural equation models
Lukasz Widla-Domaradzki, PARP, Poland

CPS1264-31: New weighted extreme value index estimator for randomly right-censored data
Louiza Soltane, Mohamed Khider University, Biskra, Algeria

CPS2193-32: The metadata role for quality improvement of official statistics
Naglaa Zain El_Deen Hegab, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS2225-33: Updating views on Black Litterman model
Retno Subekti, Gadjah Mada University, Indonesia

CPS2227-34: How will we know when we have achieved our dream: A world free of poverty?
Jonathan Haughton, Suffolk University, USA

CPS2028-35: Covariate-Adjusted response-adaptive designs for semi-parametric survival responses
Ayon Mukherjee, Novartis Healthcare Private Limited, India

CPS2196-36: The national data infrastruture in statistics Portugal and the data access for scientific research purposes – Evolution and challenges
Jose Pinto Martins, Statistics Portugal

CPS2202-37: A comparative study of test statistics for testing homogeneity of variances in analysis of variance models
Abimibola Oladugba, University of Nigeria, Nsukka

CPS1285-38: Piecewise autoregression for general integer-valued time series
Mamadou Lamine Diop, Senegal

CPS2197-39: Comparison of measurement methods
Czeslaw Domanski, University of Lodz, Poland

CE4.02
1.20 PM – 2.00 PM - Foyer Level 3 (East)

CPS1207-01: Bayesian decision fusion of palm and finger prints for personal identification
Mustafa Mumtaz, National University of Sciences and Technology, Sector H-12, Islamabad, Pakistan

CPS2269-02: Demographic analysis at the subnational levels
Muhamad Fadzil Ismail, Department of Statistics Malaysia

CPS2033-03: One-Sided misclassification of a binary confounder and bias when estimating causal effects
Ronnie Pingel, Uppsala University, Sweden

CPS1490-04: Big data predictive analytics using machine learning for official statistics
Nehall Ahmed Farouk, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS1858-05: Research on the digital economic index system and evaluation in Qingdao
Gang Wei, Qingdao Statistical Institute, China

CPS2185-06: Decent work" in Egypt between 2017 and 2018
Mostafa Younes Yousef, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS1112-07: An index of the Terms of Trade (ITT) for agriculture and non-agriculture
Gabriel Kulomba Simbila, National Bureau of Statistics, United Republic of Tanzania

CPS2189-08: The role of institutional factors in the FDI-Growth relationship in Waemu countries
Apollos Prince Djogbenou, African School of Economics/ Unité de Gestion des Réformes-Mef/Benin

CPS2191-09: Estimating the attack rate for a vector-borne infectious disease based on a clinical sample during a Zika outbreak
Paul J. Fields, St. George's University, Grenada

CPS650-10: Bayesian estimation of the scale parameter of the Weimal distribution
Oluwafemi Samuel Oyamakin, University of Ibadan, Nigeria

CPS2035-11: Earning and shares of paid employees in different industries by citizenship
Nor Alkashah Arif Shah, Department of Statistics Malaysia

CPS2194-12: Nutritional status and determinants of malnutrition among children in Morocco
Fouzia Daoudim, High Commission of Planning, Morocco

CPS1203-13: Statistical approach to transliteration and back transliteration for English-Punjabi language pair
Jasleen Kaur, P P Savani University, India

CPS1276-14: A multilevel approach to correlates of anaemia in women in the Democratic Republic of Congo
Jose Kandala, University of Kinshasa, The Democratic Republic of the Congo

CPS1404-15: K-Mean classification methods on the Gambian GBACE method
Babanding Sanyang, Department of Forestry, Gambia

CPS2262-16: How the functional empirical process can statistically assess whether or of not one millennium goal is reached
Mohamed Cheikh Haidara, Lerstad Gaston Berger University of Saint-Louis, Senegal

CPS2239-17: Gender statistics of household fisheries industry in Indonesia
Sri Hartini Rachmad, Badan Pusat Statistik, Indonesia

CPS2247-18: Modeling Spatial Spillovers of divorce in Senegal using Spatial Durbin Model: A Maximum Likelihood estimation approach
Alassane Aw, Assane Seck University of Ziguinchor, Senegal

CPS1963-19: The measurement of China's new energy industry agglomeration degree and its influencing factors
Qian Li, Renmin University of China

CPS2159-20: The importance of rural inflation and urban inflation: The case of Indonesia
Charisma Pratiwi Anwar, Badan Pusat Statistik, Indonesia

CPS1967-21: Modelling farmer choice between crops and raw milk production in Senegal
Mamadou Daffe, ANSD Agence Nationale De La Statistique Et De La Démographie, Senegal

CPS1139-22: Application of Critical Path Method (CPM) and Project Evaluation Review Technique (PERT) in project planning and scheduling
Jamiu Olalekan Makinde, Enugu State Bureau of Statistics, Nigeria

CPS2167-23: Chaotic behavior detection in the bilateral exchange rates between Philippine peso and US dollar
Jhoanne Rose Tomarong Siete, University of the Philippines, Diliman, Quezon City

CW4.02
1.20 PM – 2.00 PM - Foyer Level 3 (West)

CPS2404-24: Dengue surveillance using functional data analysis
Zezhong Wang, City University of Hong Kong

CPS2298-25: Way ahead of Malaysia's automotive industry: An assessment on national car
Masitah Kamaludin, Department of Statistics Malaysia

CPS1865-26: Robust estimation of the Mahalanobis distance with mixed continuous and categorical data
Tsung-Chi Cheng, Taiwan, Chinese Taipei

CPS645-27: Socio-economic and demographic determinants affecting the actual and prospective reproduction decision of families of children with cancer after discovery of the disease
Nevein Nagy Aneis, NPC Egypt

CPS1929-28: Economic policy uncertainty and financial market volatility: Evidence from Japan
Takayuki Morimoto, Kwansei Gakuin University, Japan

CPS649-29: A new discrete analog of the continuous lindley distribution, with reliability applications
Ahmed Z. Afify, Benha University, Egypt

CPS2212-30: Distribution of working population and economic activities in the Northern Region, Malaysia
Nur Azmina Ahmad Zuhkhori, Department of Statistics Malaysia

CPS657-31: Right censored observations in a parametric mixture cure fraction models: Application to ovarian cancer
Serifat Adedamola Folorunso, University of Ibadan, Nigeria

CPS664-32: Strengthened industrial statistics for sustained industries in the developing countries
Ombeni Eliapenda Kaluse, Eastern Africa Statistical Training Centre, Tanzania

CPS1352-33: Comics for investing statistical knowledge
Yuniarti Yuniarti, Badan Pusat Statistik Indonesia

CPS1258-34: Productivity assessment of hydroelectric stations: An application of Hicks-Moorsteen total factor productivity index
Amritpal Singh Harnek Singh Dhillon, Gujarat Industries Power Company Ltd. (GIPCL), India

CPS2393-35: Exponentiated muth distribution with application to lifetimes data
Vikas Kumar Sharma, Institute of Infrastructure Technology Research and Management (IITRAM), India

CPS1495-36: Non-Inferiority test for continuous variable with variable margin in an active controlled trial
Arsene Brunelle Sandie, Pan African University, Institute of Basics Science, Technology and Innovation/ Jomo Kenyatta University of Agriculture and Technology (PAUSTI/JKUAT), Kenya (Nairobi)

CPS1498-37: Block clustering of binary data with Gaussian co-variables
Sylla Seydou Nourou, Gaston Berger University / Institut Pasteur, Senegal

CPS2175-38: Estimating the basic reproduction number for the sir model of infectious disease transmission during a Zika outbreak
Paul J. Fields, St. George's University, Grenada

CPS652-39: Performance measure on multiclass classification in data mining technique
Chindo Abdulrasaq Ayinla, National Centre for Hydro-Power Research and Development. University of Ilorin. Nigeria

CPS656-40: Effect of parental characteristics on child mortality in Myanmar
Nyaung Tai, Central Statistical Organization, Myanmar

CPS669-41: Reliability modeling of redundant system of non-identical units with priority and preventive maintenance subject to mot
Ashish Kumar, Manipal University Jaipur, India

CPS1861-42: Spatial analysis of youth demographic and socioeconomic development indicators in Egypt
Eman Ahmed Oriby, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS647-43: Relation between economic cost of having child and the socio-economic demographic determinants: Case study
Mohamed Mostafa Hassan, Institute of Statistical Studies and Research, Egypt

CPS1410-44: Linear discriminant analysis on the GBACE data
Abdoulie Bah, Ministry of Health, Gambia

CPS1432-45: A generalization of TOPP and LEONE family of distribution
Bamidele Mustapha Oseni, Federal University of Technology, Akure, Nigeria

LTDG4.10
12.50 PM – 1.45 PM - Meeting Room 304

The LISA 2020 Program to Build Statistical Analysis and Data Science Capacity
Chair: *Eric Vance*

Associations & Special Interest Groups:
Statistical Capacity Building, International Society for Business and Industrial Statistics (ISBIS), International Association for Statistical Education (IASE), International Association for Statistical Computing (IASC)

- How do you provide your students with real projects and real data to apply their statistical analysis and data science skills?
- How do you promote the extraordinary power of statistics at your university or in your community?
- How do you transform evidence into action for development for the benefit of society?

LTDG4.11
12.50 PM – 1.45 PM - Meeting Room 305

Official Statistics using 'un-official' data, a threat or a challenge? Chair: *Pieter Everaers*

Associations & Special Interest Groups:
International Association for Official Statistics (IAOS)

- To what extent should/can un-official data be used in compiling official indicators for the SDG's?
- What kind of mechanism should be in place to guarantee the level quality required for 'official statistics'?
- How can the Statistical Journal of the IAOS via a discussion platform contribute to this (but also other) important discussion?

LTDG4.12
12.50 PM – 1.45 PM - Meeting Room 306

Leading Statistics in the Future for Young Statisticians
Chair: *Mahmoud Elsarawy*

Associations & Special Interest Groups:
International Association for Official Statistics (IAOS), Young Statisticians (YS)

- How can young statistician raise their knowledge and experiences?
- How young statistician's associations help in raising statistical awareness?

D4.00
2.00 PM – 3.40 PM - Plenary Hall

IPS-44: Recent Advances Around Functional Data
Organiser: *Frederic Ferraty*
Chair: *Byeong Park*

Estimating a covariance function from fragments of functional data
Wei Huang, University of Melbourne, Australia

Super-consistent estimation of points of impact in nonparametric regression with functional predictors
Alois Kneip, University of Bonn, Germany

Spatial prediction of multivariate functional data: The case of light and chlorophyll-a profiles in the antarctic ocean
David Nerini, University of Aix-Marseille, France

Varying-Coefficient Additive Models: Two Birds with One Stone?
Jane-Ling Wang, University of California at Davis, USA

D4.01
2.00 PM – 3.40 PM -: Ballroom 2

IPS-101: Advances in Survey Statistics for Treating Non-Ignorable Nonresponse
Organiser: *Risto Lehtonen*
Chair: *Denise Britz Do Nascimento Silva*

Instrumental calibration for the treatment of nonignorable unit nonresponse in surveys
David Haziza, Université de Montréal, Canada

Semiparametric nonresponse model with nonignorable nonresponse
Jae Kwang Kim, Iowa State University, USA

Comparing calibration and mass-imputation methods when nonresponse depends on the variable of interest
Maria Giovanna Ranalli, University of Perugia, Italy

D4.02
2.00 PM – 3.40 PM - Banquet Hall

IPS-140: Outlier Detection
Organiser: *Peter Filzmoser*
Chair: *Patrick J.F. Groenen*

Outlier detection in compositional data: From row-wise to cell-wise
Peter Filzmoser, TU Wien, Austria

Detection and visualization of outliers in establishment surveys
Valentin Todorov, United Nations Industrial Development Organization (UNIDO), Austria

Evaluating outlier detection methods: A critical review of performance measures
Pedro Duarte Silva, Universidade Catolica Portuguesa

D4.03
2.00 PM – 3.40 PM - Conference Hall 1

IPS-187: Elicitability: Generalizations and Their Application
Organiser: *Johanna F. Ziegel*
Chair: *Thordis Thorarinsdottir*
Discussant: *Alexander Jordan*

Dynamic belief elicitation
Nicolas Lambert, Stanford University, USA

Interpretation of point forecasts with unknown directive
Patrick Schmidt, Heidelberg Institute for Theoretical Studies, Germany

Probability-weighted elicitability
Abdelaati Daouia, University of Toulouse Capitole, France

D4.04
2.00 PM – 3.40 PM - Conference Hall 2

IPS-219: Using Statistics to Change Behaviour: Successful Case Studies
Organiser & Chair: *Chuah Kue Peng*
Discussant: *Adrian Franco Barrios*

Determinants and impacts of financial literacy in the Lao PDR
Peter Morgan, Asian Development Bank Institute, Japan

The construction of historical GDP estimates of Singapore, 1870-1900: Progress and perspective
Ichiro Sugimoto, Soka University, Japan

Poverty measurement in the era of food away from home: Testing alternative approaches in Vietnam
Julie Perng, World Bank, USA

D4.05
2.00 PM – 3.40 PM - Conference Hall 3

IPS-250: Balancing Privacy and Access in a Changing World – International Experiences
Organiser: *Lars Vilhuber*
Chair: *John Maron Abowd*

Confidentiality protection and physical safeguards: A review
Lars Vilhuber, Cornell University, USA

Statistical data-production in a digitized age: Potentials for statistics, research and society
Stefan Bender, Deutsche Bundesbank, Germany

ABS Datalab: A new frontier in data access, latest developments and future challenges
Daniel Elazar, Australian Bureau of Statistics

D4.06
2.00 PM – 3.40 PM - Plenary Theatre Auditorium

IPS-279: Competitive Statistical Machine Learning for Financial Credit Scoring: The Development and Validation of the Cloud-Based General Financial Insights (GFI)
Organiser: *Haniza Yon*
Chair: *Rosna Awang-Hashim*

An empirical comparison of various machine learning techniques for predicting borrowers' loan servicing behavior
Rense Lange, Global Psytech Sdn Bhd, Malaysia

Statistical and psychometric properties of GFI
Haniza Yon, Malaysian Psychometrics Association

Structural equation modeling of psychographic variables in financial credit scoring
Nur Ayu Johar, Global Psytech Sdn Bhd, Malaysia

D4.07
2.00 PM – 3.40 PM - Meeting Room 301

IPS-233: Environmental Processes and Human Activities: Capturing Their Interactions Via Statistical Methods (EPHASTAT)
Organiser & Chair: *Fedele Pasquale Greco*

Bayesian measurement error correction in structured additive distributional regression
Alessio Pollice, University of Bari, Italy

Bayesian hierarchical modeling of multivariate climate data
Giovanna Jona Lasinio, Sapienza University of Roma, Italy

Coupled Gaussian processes for functional data analysis
Sara Fontanella, University of Torino, Italy

Analysing a wolf trajectory data, through the new formalization of the Logistic-Gaussian process
Gianluca Mastrantonio, Polytechnic of Torino, Italy

D4.08
2.00 PM – 3.40 PM - Meeting Room 302

IPS-243: Standards and Integration for Efficiency and Comparability Agricultural Statistics
Organiser & Chair: *Flavio Pinto Bolliger*

The new proposal of Forest Products Classification and Definitions
Michal Synek, Forest Products Statistics in the Czech Republic, Olomouc

Strategic Planning for Agriculture and Rural Statistics (SPARS) and its impact at country level
Hem Raj Regmi, Nepal Central Bureau of Statistics, Nepal

AGRISurvey around the world
Michael Allen Steiner, World Bank, USA

D4.09
2.00 PM – 3.40 PM - Meeting Room 303

IPS-300: Advances in Risk Modelling for Actuarial Applications
Organiser: *Shaiful Anuar Abu Bakar*
Chair: *Mazni Mohammad*

Fuzzy approach to the occupational risk variable in designing a defined benefit pension funds
Yulia Resti, University of Sriwajaya, Indonesia

Risk estimation for casualty insurance losses
Shaiful Anuar Abu Bakar, University of Malaya

Coherent mortality forecasting for sub-populations using product-ratio model: An application to Malaysian age-specific mortality rates
Syazreen Niza Shair, Universiti Teknologi MARA, Malaysia

Weather based crop Insurance or Stochatic Mortality Modelling for Indian population
Ramkrishna Lahu Shinde, Kavayitri Bahinabai Chaudhari North Maharashtra University, Jalgaon, India

D4.10
2.00 PM – 3.40 PM - Meeting Room 304

STS-480: Unleash the Value of Advanced Analytics in Insurance
Organiser & Discussant: *Wei Jie See*
Chair: *Chin Ching Lau*

Using wearable data to empower healthier lives with biological age model
Dai Ting, Scor Global Life, USA

The influence of telematics device on driving behaviour of commercial vehicles across long and short haul drivers
Mohd Azman Mohd Ismail, Atilze Digital Sdn. Bhd, Malaysia

D4.11
2.00 PM – 3.40 PM - Meeting Room 305

STS-552: Managing External Sector Statistics (ESS) Compilation in a Highly Inter-Connected and Digital World
Organiser: *Norhayati Razi*
Chair: *Fraziali Ismail*

Sectorisation and information granularities on portfolio investment statistics
Norhayati Razi, Bank Negara Malaysia

Financial integration and globalization: Challenges and opportunities for external financial statistics
Carol Bertaut, Board of Governors of the Federal Reserve System, USA

Forecasting the recovery rate of non-financial corporations
Natalia Nehrebecka, National Bank of Poland

Uses of mirror data: Estimation of household assets and liabilities with banks abroad
João Falcao Silva, Central Bank of Portugal

D4.12
2.00 PM – 3.40 PM - Meeting Room 306

STS-583: Geospatial Information for International Statistics
Organiser & Chair: *Pietro Gennari*
Discussant: *Gemma Van Halderen*

Implementing a geospatial data strategy in the European statistical system
Mariana Kotzeva, Eurostat, Italy

Cost-effectiveness of remote sensing for agricultural statistics in developing and transition countries
Yakob Mudesir Seid, FAO, Italy

Addressing the issue of missing or non-ideal sampling frames in household surveys in developing countries through remote sensing data
Michael Wild, World Bank, USA

Using GIS and Official Statistics to support assessments of risk to sustainable development from environmental degradation
Daniel Clarke, United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP)

D4.14
2.00 PM – 3.40 PM - Meeting Room 402

STS-446: A new publishing model for UK GDP estimates
Organiser: *James Edward Scruton*
Chair: *Sumit Dey-Chowdhury*

The rationale for a new GDP publication model
James Edward Scruton, The Office for National Statistics, UK

The benefits and trade-offs of the new GDP publication model
Sumit Dey-Chowdhury, The Office for National Statistics, UK

Monthly GDP: Retrospect and Prospect
Martin Robert Weale, King's College, London, UK

D4.15
2.00 PM – 3.40 PM - Meeting Room 403

STS-523: Administrative Data as Alternative and Reliable Sources of Official Statistics
Organiser: *Shazura Zainol Abidin*
Chair & Discussant: *Kenneth Simler*

Harnessing the value of administrative data: A central bank's experience
Shazura Zainol Abidin, Bank Negara Malaysia

Use of administrative data as an alternative source of official statistics: Opportunities and challenges
Siti Haslinda Mohd. Din, Department of Statistics Malaysia

Sourcing of administrative record for official compilers
Wan Zarazillah Wan Abu Bakar, Suruhanjaya Syarikat Malaysia

D4.16
2.00 PM – 3.40 PM - Meeting Room 404

CPS-38: Applications of Statistics: Medical
Chair: *Yong Zulina Zubairi*

CPS1201: Combined criteria for dose optimisation in early phase clinical trials
Iftakhar Alam, Institute of Statistical Research and Training (ISRT), University of Dhaka, Bangladesh

CPS1343: Propensity score based adjustment for covariate effects on classification accuracy of biomarker using ROC curve
M. Shafiqur Rahman, University of Dhaka, Bangladesh

CPS1855: Extended age-environment model for analysing data on breast cancer death rates for Japanese elderly women
Nobutane Hanayama, Shobi University, Japan

CPS2165: Reaction times: A new approach using new advances in distribution theory
Carla Susete Francisco, Catholic University of Portugal

D4.17
2.00 PM – 3.40 PM - Meeting Room 405

CPS-39: Application of Statistics: Public Health
Chair: *Suzana Abu Bakar*

CPS1336: Estimating causal effect of low birth weight on malnutrition for children under five years in Bangladesh
Md. Ariful Islam Sanim, University of Dhaka, Bangladesh

CPS1394: The impact of ageing population, unemployment, obesity, inflation, out-of-pocket expenses, and income per capita on Malaysia's health expenditures: A linear regression analysis
Abd Aziz Arrashid Abd Rajak, Universiti Kebangsaan Malaysia

CPS1494: Assessment of prevalence and associated risk factors of diabetic retinopathy among known type II Diabetic Mellitus patients in a territory care hospital in Kochi Kerala: A hospital based cross sectional study
Senthilvel Vasudevan, King Saud bin Abdulaziz University for Health Sciences, India

CPS2116: Risks of low birth weight associated with tobacco smoking among women in India
Samarul Islam, International Institute for Population Sciences, India

CPS2169: Percentile-based approaches for assessing impacts of school day energy expenditure on 18-month change in BMI among elementary school-aged children
Carmen Tekwe, Indiana University – Bloomington, USA

CPS2292: Instrumental variable approach to estimating the scalar-on-function regression model with measurement error with application to energy expenditure assessment in childhood obesity
Carmen Tekwe, Indiana University – Bloomington, USA

D4.18
2.00 PM – 3.40 PM - Meeting Room 406

CPS-40: Data Science
Chair: *Riyanti Saari*

CPS1119: Forecasting agricultural commodity prices in turkey using artificial neural network
Fethi Şaban Özbek, Turkish Statistical Institute, Turkey

CPS1121: Leak localization on a pipeline using convolutional neural network for non-revenue water management
Jeeva Sathya Theesar Shanmugam, Universiti Tunku Abdul Rahman (UTAR), Malaysia

CPS1440: Spatial cart classification trees
Jean-Michel Poggi, Lmo Université Paris SUD, France

CPS2066: Real time prediction of infectious disease outbreaks based on google trend data in Africa
Elvis Karanja Muchene, Kenya Markets Trust

CPS2156: Bias removal through sampling in machine learning models
Luis Sanguiao Sande, Instituto Nacional de Estadística (INE), Spain

CPS2564: Nowcasting modelling of volatile and non-volatile food prices using crowdsourcing data (case study of some food commodities prices on Lombok Island in 2015)
Tiffany Rizkika, Badan Pusat Statistik Indonesia
Wida Siddhikara P, Badan Pusat Statistik Indonesia

D4.19
2.00 PM – 3.40 PM - Meeting Room 407

CPS-41: Statistical Theory and Methodology
Chair: *Arifah Bahar*

CPS1408: Probabilistic hourly load forecasting
Caston Sigauke, University of Venda, Zimbabwe

CPS1458: A new mixed INAR(P) model for time series of counts
Wooi Chen Khoo, Sunway University, Malaysia

CPS2012: Forecasting conditional covariance matrices in high-dimensional data: A general dynamic factor approach
Luiz Koodi Hotta, University of Campinas, Brazil

CPS 2526: Least trimmed squares estimators for functional principal component analysis
Holger Cevallos-Valdiviezo, Escuela Superior Politecnica del Litoral (ESPOL), Ecuador

CPS 2107: Joint Asymptotic Normality of Stopping Time and Sequential Estimators for Monitoring Autoregressive Processes
JunfanTao, Yokohama National University, Yokohama, Japan

D4.20
2.00 PM – 3.40 PM - Meeting Room 408

CPS-30: Statistical Computing
Chair: *Ng Kok Haur*

CPS1876: Nearest neighbor classifier based on generalized inter-point distances for HDLSS data
Sarbojit Roy, Indian Institute of Technology Kanpur, India

CPS1891: A knot selection algorithm for regression splines
Tzee-Ming Huang, National Chengchi University, Taiwan, Chinese Taipei

CPS2045: Let the PDES guide you to new insight into and fast inference for complex models in space and space-time
Haakon Bakka, King Abdullah University of Science and Technology (KAUST), Saudi Arabia

CPS2220: Regime-switching state-space models with applications to brain imaging
David Degras, University of Massachusetts Boston, USA

D4.21
2.00 PM – 3.40 PM - Meeting Room 409

CPS-53: Statistical Education
Chair: *Norli Anida Abdullah*

CPS1166: Fractal structure of hierarchical cores in an analysis of use of technologies
Francisco Casanova-Del-Angel, Instituto Politecnico Nacional, Mexico

CPS1955: Master's programme in data analytics for government: The UK experience
Solange Correa Onel, Office for National Statistics, UK

CPS2126: Item analysis in the assessment of knowledge in biostatistics among the postgraduate students of a medical college in Northeast India
Rajkumari Sanatombi Devi, Sikkim Manipal Institute of Medical Sciences, India

CPS2173: Determinants of pupils' success in primary schools in Benin
Felicien Accrombessy, World Bank Group, Benin

D4.22
2.00 PM – 3.40 PM - Meeting Room 410

CPS-29: Social
Chair: *Muhammad Amri Idris*

CPS1239: The servicification of manufacturing in Asia: Redefining the sources of labor productivity using time
Valerie Anne Mercer-Blackman, Asian Development Bank, Philippines

CPS1243: Evolution in comparative terms of people with and without disabilities in Brazil
Paulo Tadeu Meira Silva De Oliveira, University of São Paulo (USP), Brazil

CPS1407: Measuring the social dimensions of poverty and deprivation
Diana Dilshanie Deepawansa, Department of Census and Statistics, Sri Lanka

CPS1807: Weight matrix comparison in exploratory spatial data analysis on social capital and poverty
Eko Hadi Nurcahyo, Badan Pusat Statistik Indonesia

CPS2052: An analysis of the contribution of women in Abu Dhabi
Khaddouj Abubaker Abdulla, Statistics Centre Abu Dhabi, UAE

CPS2109: Measurement of multidimensional child poverty in Morocco 2001-2014: Methodology and results
Ezzrari Abdeljaouad, Morocco

E4.00

4.00 PM – 5.10 PM - Plenary Hall

ISI's President's Invited Keynote Lecture

Organiser & Chair: *Helen MacGillivray*

Enhancing data science ethics through statistical education and practice

Jessica Utts, University of California – Irvine

Jessica Utts is a Professor Emerita in the Department of Statistics at University of California, Irvine (UCI) and was the 2016 President of the American Statistical Association (ASA). She served as Chair of the UCI Statistics Department for 5 years, and led the department in initiating a major in Data Science. Her honors include being an elected Fellow of the ASA, the Institute of Mathematical Statistics (IMS), the American Association for the Advancement of Science, and the Association for Psychological Science. She is the recipient of the ASA Founder's Award, the IMS Harry C. Carver Medal, the Distinguished Service Award for the National Institute of Statistical Sciences, and two awards for distinguished teaching. She has served as President of the Western North American Region of the International Biometric Society (WNAR), Chair of the Committee of Presidents of Statistical Societies (COPSS), and is currently on the Council of the International Statistical Institute (ISI).

Professor Utts has a long-standing interest in promoting statistical literacy, and has published three statistics textbooks with that emphasis. In addition to statistics education her research involves applications of statistics to a variety of areas, most notably parapsychology, for which she has appeared on TV shows including Larry King Live, Nightline and CNN News

Professor Utts will deliver the President's Invited Keynote Lecture on "Enhancing Data Science Ethics through Statistical Education and Practice" at the ISI WSC in Kuala Lumpur.

Abstract: As sources of data become more plentiful and massive data sets are easy to acquire, new ethical issues arise involving data quality and privacy, and the analysis, interpretation and dissemination of data-driven decisions. There are numerous anecdotes involving abuses of complex data analyses and algorithms, and the impact they have had on society. What can statisticians do to help enhance data science ethics in practice, and what can statistics educators do to instill sound ethical behavior in our students? We have opportunities to practice and teach ethical conduct relevant to all stages of the data life cycle. This talk will address issues impacting ethical data science, with a focus on how statisticians can help raise awareness and encourage implementation of ethical best practices.

23rd August 2019
(Friday)

Updated as at 17th August 2019

A5.00
8.50 AM – 10.00 AM - Plenary Hall

SIPS-351: Journal of Data Science, Statistics and Visualisation Session
Organiser: *Wing Kam Fung*
Chair: *Patrick J.F. Groenen*

Multiview graph embedding as a generalization of canonical correlation analysis
Hidetoshi Shimodaira, Kyoto University, Japan

Building plots to explore data: Beyond histograms, barcharts and scatterplots to high-dimensions and statistical inference
Di Cook, Monash University, Australia

A5.02
8.50 AM – 10.00 AM - Banquet Hall

SIPS-357: Bernoulli Society Journal Lecture
Organiser & Chair: *Mark Podolskij*

A selective survey of selective inference
Jonathan Taylor, University of Stanford, USA

A5.03
8.50 AM – 10.00 AM - Conference Hall 1

SIPS-366: Gosset Lecture
Organiser: *Nalini Ravishanker*
Chair: *Fabrizio Ruggeri*

Machine learning in modern commerce
David Banks, Duke University, USA

A5.04
8.50 AM – 10.00 AM - Conference Hall 2

SIPS-371: Highlights from The Journal STAT: The ISI's Journal for the Rapid Dissemination of Statistics Research
Organiser & Chair: *Helen Zhang*

Functional boxplots for multivariate curves
Marc Genton, King Abdullah University of Science and Technology (KAUST), Saudi Arabia

BRISC: Bootstrap for rapid inference on spatial covariances
Abhirup Datta, Johns Hopkins University, USA

A5.05
8.50 AM – 10.00 AM - Conference Hall 3

SIPS-1313: Tinbergen Prize for Young Statisticians
Organiser: *Helen MacGillivray*
Chair: *Ada van Krimpen*

Modeling the financial market indicators with semiparametric volatility model with varying frequency
Jetrei Benedick Reyes Benito, University of the Philippines Diliman

Intra Household resource all ocation and gender relation in Cote D'ivoire: A way for facing non inclusive growth situation
Edvira Malliedje Fokam, Ministry of Economy, Planning and Regional Development (MINEPRD), Cameroon

A5.06
8.50 AM – 10.00 AM - Plenary Theatre Auditorium

SIPS-1314: Host Country Malaysia Invited Paper Session 2: Artifical Intelligence in Action
Organiser & Chair: *Punithaa Kylasapathy*
Moderator: *Karen Cheah*

Panellists
- *Surina Shukri, CEO of Malaysia Digital Economy Corporation*
- *Chetan Krishnamurthy, IBM, Asia Pacific Watson Business Lead, Malaysia*
- *Krishna Atkuru, Grab Pay, Head of Engineering, Malaysia*
- *David Rajoo, Symantec, Chief Cybersecurity Architect for ASEAN, Malaysia*

B5.00
10.30 AM – 12.30 PM - Plenary Hall

STS-524: The Feedback Loop: Impact of Exchange Rates to Economic Data and its Inverse
Organiser: *Mohd Dzull Fefry Mohd Bakri*
Chair & Moderator: *Mohamad Bazli Che Rozenan*

The feedback loop: Impact of exchange rates to economic data and its inverse
Saktiandi Supaat, Executive Vice President, Maybank

Panellists
- *Saktiandi Supaat, Executive Vice President, Maybank*
- *Ridzuan Mohamed, Director, Khazanah Nasional Berhad*
- *Mohd Afzanizam Abdul Rashid, Chief Economist at Bank Islam Malaysia Berhad*

B5.02
10.30 AM – 12.30 PM - Banquet Hall

IPS-129: Measuring Crime
Organiser & Chair: *Adrian Franco Barrios*
Discussant: *Maria Giuseppina Muratore, Adrian Franco Barrios*

The cost of victimization
Claudia Villante, Italian National Institute of Statistics (ISTAT), Italy

The costs of gender-based violence against women in Spain
Luis F. Rivera-Galicia, University of Alcalá, Spain

B5.03
10.30 AM – 12.30 PM - Conference Hall 1

IPS-272: Statistical Modeling of Natural Hazards and Risks
Organiser: *Serge Guillas*
Chair: *Sophie Dabo*

TBA
Olivier Le Maitre, Centre national de la recherche scientifique (CNRS), France

Heat-duration-frequency modeling under non-stationary conditions
Taha Ouarda, Institut national de la recherche scientifique (INRS), Canada

Detecting shape anomalies in functional data with elastic depth
Trevor Harris, University of Illinois, USA

B5.04
10.30 AM – 12.30 PM - Conference Hall 2

IPS-277: Developing Effective Models of Public-Private Partnerships in National Statistical Ecosystem: Lessons from Asia
Organiser: *Hristina Aleksandrova*
Chair: *Misha V Belkindas*

Developing effective models of public-private partnerships in National Statistical Ecosystem: Lessons from Asia
Matthew Shearing, Freelance Statistics Capacity Building Expert in Southeast Asia

Panellists
- *Andrew J.Flatt, Senior Freelance Advisor (Former Director UNESCAP Statistics Division), Thailand*
- *Phetsamone Sone, Deputy Head of Lao Bureau of Statistics, Laos*
- *Tomas Africa, Former Executive Director of NSO Philippines and Registrar General*
- *Eileen Capilit, Independent expert/consultant UN ESCAP, USA*
- *Titi Lestari, Director of Finance, IT and Tourism Statistics, Badan Pusat Statistik Indonesia*

B5.05
10.30 AM – 12.30 PM - Conference Hall 3

IPS-235: Developing A Statistical Framework for the Measurement of Sustainable Tourism
Organiser & Chair: *Guido Ferrari*
Discussants: *Jose Luis Sanchez-Ollero, Can Huang*

Development and application of tourism statistics in China
Yanyun Zhao, Renmin University of China

The comparative evaluation of Beijing's tourism competitiveness
Guo Qian, Beijing Wuzi University, China

The effectiveness of tourism public spending in Italy
Fabrizio Antolini, University of Teramo, Italy

The development of meetings, incentive, exhibitions, and conventions (MICE) industry in Italy: The case of Campania region
Biagio Simonetti, University of Sannio, Italy

B5.06
10.30 AM – 12.30 PM - Plenary Theatre Auditorium

IPS-71: Where are the Boundaries of Official Statistics?
Organiser: *Steven Vale*
Co-organiser: *Valker Taube*
Chair: *Georges-Simon Ulrich*

Legislative boundaries of official statistics
Anahit Safyan, National Statistical Service of the Republic of Armenia

Boundaries and coordination of the national statistical system
Volker Taube, European Free Trade Association, Luxembourg

National statistical system of Georgia
Gogita Todradze, GeoStat, Georgia

Central Bank Statistics as part of the official statistics - The case of the European System of Central Banks
Aurel Schubert, Vienna University of Economics and Business, Austria

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B5.07
10.30 AM – 12.30 PM - Meeting Room 301

IPS-30: Rushing Toward Administrative Censuses: Enablers and Challenges
Chair: *Paolo Valente*
Discussant: *Eric Schulte Nordholt*

Developing methodology for the register-based census in Estonia
Diana Beltadze, Statistics Estonia

The integration of geographic and territorial data sources into the base register of territorial and geographical entities
Fabio Crescenzi, Italian National Institute of Statistics, Italy

The use of registers in the German Censuses 2011, 2021 and beyond
Markus Zwick, Federal Statistical Office Germany

Transition from traditional census to registers based census in Poland
Dominik Rozkrut, Central Statistical Office of Poland

B5.08
10.30 AM – 12.30 PM - Meeting Room 302

IPS-199: Effects of Digitalisation on the Measurements and Dynamics of Inflation
Organiser & Chair: *Chuah Kue Peng*
Discussant: *Ho Sui-Jade*

Digitalisation and impact on the Consumer Price Index on a small open economy
Jitendra Nathsingh Bissessur, Acting Director, Economic Analysis & Research and Statistics, Bank of Mauritius

Digitalisation and the measurement of inflation and growth
Gabriel Quiros-Romero, International Monetary Fund (IMF), USA

Modernisation of price collection: Malaysia's experience
Fuziah Md. Amin, Department of Statistics Malaysia

B5.09
10.30 AM – 12.30 PM - Meeting Room 303

IPS-208: Integrating Technology in Data Collection
Organiser & Chair: *Linda J Young*

Agricultural Census 2020 – How to reduce costs and burden? The European statistical system approach
Christine Wirtz, Eurostat, Luxembourg

The importance of technology to the future of agricultural statistics
Barbara R Rater, USDA National Agricultural Statistics Service, USA

Using digital data collection to increase response rates and quality
Luqmaan Omar, Statistics South Africa

B5.10
10.30 AM – 12.30 PM - Meeting Room 304

IPS-246: Measuring Well-Being at Local Level to Fine-Tune Public Policies
Organiser: *Tiziana Laureti*
Chair: *Luigi Biggeri*
Discussant: *Eileen Capilit*

COMUNIKOS (Communicating Uncertainty in Key Official Statistics): application to measuring well-being at local level for informed public policy
Tiziana Laureti, Tuscia University, Italy

Spatial and temporal multivariate analysis of well-being at local level: An application to the Italian Equitable and Sustainable Well-being
Ilaria Benedetti, Tuscia University, Italy

A Multilevel Modelling Approach to the Analysis of Happiness in Indonesia
Ayesha Tantriana, Badan Pusat Statistik Indonesia

The OECD approach: The case of Mexico
Oscar Gasca, INEGI National Institute of Statistics and Geography Statistics Mexico

B5.11
10.30 AM – 12.30 PM - Meeting Room 305

IPS-141: Environmental Data in the Development of SDG Indicators
Organiser & Chair: *Alessio Pollice*
Discussant: *Sudipto Banerjee*

Combining data sources, technologies and machine learning for monitoring the environment and SDGS
Jacinta Holloway, Queensland University of Technology, Brisbane, Australia

Combining citizen science and professional monitoring data to conserve and sustainably use marine resources
Erin E Peterson, Queensland University of Technology, Brisbane, Australia

Using FAO's methodology for monitoring SDG target 12.3 to estimate the environmental impact of food losses
Giovanna Jona Lasinio, University of Rome, Sapienza, Italy

Environmental metrics – Where to go?
Walter Josef Radermacher, University of Rome Sapienza, Italy

B5.12
10.30 AM – 12.30 PM - Meeting Room 306

IPS-162: Ways to Improve Critical Statistical Literacy
Organiser: *Reija Helenius*
Chair: *Marjo-Riitta Sylvia Bruun*
Discussant: *John Bailer*

Real stories with real data for real people: The key to understanding and trust in official statistics
Christine Bycroft, Statistics New Zealand

A European effort to explore games and the gamification of official statistics
Sybille Luhmann, Eurostat, Luxembourg

Data governance as a tool for enhanced data literacy and utilization
Betty Gichohi, United States International University

Fake news and Big Data: A case study
Kimmo Vehkalahti, University of Helsinki, Finland

B5.13
10.30 AM – 12.30 PM - Meeting Room 401

IPS-57: Communication Challenges Across an Innovative Official Statistics Production Chain
Organiser: *Martin Karlberg*
Chair: *Lukasz Augustyniak*
Discussant: *Robert Cuffe*

Sound methodology for sound official statistics
Eric Rancourt, Statistics Canada

Building and maintaining social licence in today's data landscape
Marcel Van Kints, Australian Bureau of Statistics

The mood of "twitteratti" in Mexico: Lessons Learnt
Victor Alfredo Bustos y de la TIjera, Instituto Nacional de Estadística y Geografía (INEGI), Mexico

B5.15
10.30 AM – 12.30 PM - Meeting Room 403

IPS-200: Bayesian Inference for Stochastic Processes
Organiser & Chair: *Kengo Kamatani*

Central limit theorems for coupled particle filters
Ajay Jasra, National University of Singapore

Sequential Monte Carlo methods for Stochastic Transport Models
Wei Pan, Imperial College London, UK

The bouncy particle sampler in practice
Alexandre Thiery, National University of Singapore

Simulation of conditioned diffusions
Frank Van der Meulen, Delft University of Technology, Netherlands

B5.16
10.30 AM – 12.30 PM - Meeting Room 404

STS-426: Statistical Solution of Astrophysical Problems
Organiser: *Asis Kumar Chattopadhyay*
Chair: *Eric Feigelson*

Clustering and classification of astronomical objects: A new paradigm in statistics
Asis Kumar Chattopadhyay, University of Calcutta, India

Robust estimation and outlier detection for astronomical data
Ayanendra Nath Basu, Indian Statistical Institute, India

Study on star formation history of nearby galaxies a Bayesian approach
Tanuka Chattopadhyay, University of Calcutta, India

Unsupervised classification of galaxy spectra and interpretability
Didier Fraix-Burnet, University Grenoble Alpes, France

A statistically robust approach to the detection of astrophysical transient and periodic phenomena
Guillaume Belanger, European Space Agency (ESAC), Spain

B5.17
10.30 AM – 12.30 PM - Meeting Room 405

STS-436: Record Value Theories and their Applications
Organiser: *Mohammad Ahsanullah*
Chair: *Gane Samb Lo*
Discussants: *Diam Ba, Mohammad Shakil*

Trends on general theory on records and on open questions
Gane Samb Lo, Gaston Berger University, Senegal

Inference for the two-parameter bathtub-shaped distribution based on record data
Mohammad Z Raqab, University of Jordan

B5.18
10.30 AM – 12.30 PM - Meeting Room 406

STS-410: Recent Development of Directional Statistics with Application
Organiser: *Ibrahim Mohamed*
Chair: *Abdul Ghapor Hussin*

The study on the relationship between variables in Malaysian crescent moon sighting data
Ibrahim Mohamed, University of Malaya, Malaysia

A continuous bivariate circular distribution and its discretization
Kunio Shimizu, Institute of Statistical Mathematics, Tokyo, Japan

A clustering technique for outliers detection in linear functional relationship model for circular variables
Abdul Ghapor Hussin, National Defence University of Malaysia

A half-circular distribution on a circle
Adzhar Rambli, MARA University of Technology, Malaysia

B5.19
10.30 AM – 12.30 PM - Meeting Room 407

STS-339: Quality Assurance Framework within the Entry Point of Statistical Office: Statistical Business Register and Statistical Address Register
Organiser & Chair: *Zuraidy Zainal Abidin*
Discussant: *Wan Mohd Shahrulnizam Wan Mohd Najuri*

Database linkage in ensuring quality of Malaysia Statistical Business Register
Muhammad Amri Idris, Department of Statistics Malaysia

Statistical Address Register (SAR)
Sharuddin Shafie, Department of Statistics Malaysia

Quality assurance framework of the Japanese Business Register
Takashi Ioka, Statistics Bureau, Japan

Business registers as the backbone of statistics; challenges and opportunities regarding business register and outcome quality
Johan Lammers, Statistics Netherlands

B5.22
10.30 AM – 12.30 PM - Meeting Room 410

STS-700: Using Big Data for Official Statistics – The Asia and Pacific Experience
Organiser: *Gemma Van Halderen*
Chair: *Siu-Ming Tam*
Discussant: *Ronald Jansen*

Big Data for official statistics in Thailand
Hataichanok Puckcharern, National Statistics Office, Thailand

Measuring the rural access index in the Philippines
Candido Jr Jove Astrologo, Jr., Philippines Statistics Authority

Accommodating Big Data in Nepalese statistical system: Challenges and Opportunities
Suman Raj Aryal, Central Bureau of Statistics, Nepal

China's experience in the application of Big Data in official statistics
Yajing Cong, National Bureau of Statistics of China

CE5.ESRI

8.50 AM – 5.40 PM - Foyer Level 3 (East)

ESRI01-01: Mapping the territory of organized criminal groups
Jessie Bullock, Harvard University, USA

ESRI02-02: Modelling crime clustering around street segments in informal settlements a spatial analysis with R and Python in ArcGIS
Renate Thiede, Jacob Modiba, University of Pretoria, South Africa

ESRI03-03: Vancouver Green Bus Atlas
Agatha Czekajlo, University of British Columbia, Canada

ESRI04-04: Analysis of the socioeconomic and urban features that support the practice of physical activity in Mexico City, 2018
Eugen Resendiz Bontud, Alana Marie Zelays Flores, Universidad Iberoamericana de la Ciudad de México

ESRI05-05: Healthy America: A spatial modeling of diabetes cases hotspots in the United States of America (USA)
Mohammad Abdul Qadir Khan, Meghavi Prashnani, David Legates, University of Delaware, USA

ESRI06-06: Urban Environmental Noise Pollution in Paris Using Volunteered Geographic Information (VGI): Spatial Regression Models
Juan Nathaniel, Chris Wei Ziyi, National University of Singapore

ESRI07-07: Better preparing for natural disasters and changing climates: striving to minimize the damage caused by California Wildfires
Ajnadeen Al-Shawa, Jana Elkhatib

ESRI08-08: Analytical model risk. Vulcano of San Salvador and El Picacho, El Salvador
Fernando Alberto Fernandez Lopez, Ariel Alexander Quintanilla Magana, El Colegio de Michoacán A.C. (COLMICH), Mexico

ESRI09-09: Assessing the accuracy of long-term air pollution estimates produced with short term observations from unstructured sampling
Karl Chastko, University of Toronto, Canada

ESRI0-10: Use of geo-bigdata for disater management
Kshitija S. Suryawanshi, Jen Raviz, Bangkok Thailand

ESRI11-11: Analyzing road accidents at Selangor intersection
Muhammad Haiqal Ariff Mohd Zaidi, Wan Nuradira Eswan Wan Ishak, University Technology MARA, Malaysia

ESRI12-12: Characterizing small and medium-size cities in social-ecological transition in Mexico: A look from their green areas and ecosystem services
David Colin Gonzalez, Hugo Manuel Martinez Hernandez, Universidad Autonoma Metropolitana Unidad Cuajimalpa (UAM-C), Mexico

ESRI13-13: An interdisciplinary approach of observing quality of life indicators in an urban environment using geographic information systems
Kamal Abderlrahman, City University of New York, USA

ESRI14-14: Environmental Spatial Point Processes: A focus on Termite Mounds
Lizalise Mngcele, Nelson Mandela University, Port Elizabeth, South Africa

ESRI15-15: Analysis of the Relationship Between Housing Price and Car Accidents in Hong Kong
Zhu Zhengyi, Gan Dailin, The University of Hong Kong

CW5.01

12.30 PM – 1.10 PM - Foyer Level 3 (West)

CPS2210-01: Single and two-population mortality rate modeling for selected CEE countries
Justyna Majewska, University of Economics in Katowice, Poland

CPS1348-02: Flipping a statistics classroom for pre-service English language teachers
Yosep Dwi Kristanto, Universitas Sanata Dharma, Indonesia

CPS2467-03: Understanding greenhouse gas emission patterns in USA under a data science approach
Karina Gibert, Universitat Politècnica de Catalunya (UPC), Spain

CPS1925-04: Saving, borrowing and economic resourcefulness in Poland
Marek Kosny, Wroclaw University of Economics, Poland

CPS1928-05: Some issues on post misspecification inferences
Mohd Iqbal Shamsudheen, University College London, UK

CPS2020-06: Statistical matching for modeling of count data
Honeylet Talusan Santos, University of the Philippines Diliman

CPS2027-07: Developing and validating risk prediction model for re-offending of individuals with a severe mental illness (Psychosis)
Olayan Albalawi, The University of New South Wales, Australia

CPS2464-08: Bivariate smooths within Gamlss for spatially correlated count data
Fernanda De Bastiani, Universidade Federal De Pernambuco, Brazil

CPS2462-09: Ranking based variable selection for censored data using AFT models
Md Hasinur Rahaman Khan, University of Dhaka, Bangladesh

CPS2522-10: Analysing time to event outcomes in cluster randomised trials using cluster-level analysis
Anower Hossain, University of Dhaka, Bangladesh

CPS2524-11: Effects of time-lagged meteorological variables on attributable risk of leishmaniasis in central region of Afghanistan
Adedayo Majeed Adegboye, American University of Nigeria

CPS2525-12: Women Involvement/ Participation in Statistical Literacy: The Nigerian Experience
Abosede Adedayo Adepoju, University of Ibadan, Nigeria

CPS2122-13: Profiling Filipino senior high school students' performance in statistics and probability
Armi Lantano, Center for Educational Measurement, Inc., Philippines

CPS2068-14: Using predictive modelling to identify panel nonresponse
Jan-Philipp Kolb, GESIS Leibniz Institute for the Social Sciences, Germany

CPS2069-15: Big data and central banking
Pamela Kaye Azarcon Tuazon, Bangko Sentral Ng Pilipinas, Philippines

CPS2073-16: Calibration for the Census of Agriculture in Albania
Alban Çela, Institute of Statistics Albania (INSTAT)

CPS2163-17: Stochastic analysis of a Two-Unit cold standby system with priority
Mukender Singh Kadyan, Kurukshetra University, India

CPS1208-18: Order statistics approach to modeling and prediction of early mood swing
Taiwo Ajibola Soyinka, Federal University of Agriculture Abeokuta, Nigeria

CPS2171-19: A study on correlation between literacy and sex ratio in a Northeast State of India
Rajkumari Latasana Devi, Department of Home Science, Ghana Priya Women's College, India

CPS1426-20: Adjusting weights – Comparative analysis between the post-stratification, the raking and the general calibration by mathematical programming in IDSC
Mohamed Abouelenien Abouhalima, Information and Decision Support Center, Egypt

CPS2255-21: Estimating discontinuous growth from Panulirus Ornatus tank
Chuan Hui Foo, Sultan Idris Education University, Malaysia

CPS2260-22: Fertility and breast cancer mortality in Mexico
Alejandro Aguirre, El Colegio De México

CW5.02
1.20 PM – 2.00 PM - Foyer Level 3 (West)

CPS2133-24: Space dependent ordinal pattern probabilities in time series
Jan Alexander Schnurr, Siegen University, Germany

CPS2176-25: Wavelet methods in statistics: Application in forecasting exchange rate volatility
Karamti Chiraz, Institut Superieur d' Administration des Affaires de Sfax (ISAAS), Tunisia

CPS2213-26: The evolution of foreign direct investment in Malaysia
Syamimi Shahbudin, Department of Statistics Malaysia

CPS1959-27: Index system and evaluation research of new and old kinetic energy conversion in Qingdao
Hongwen Hou, Qingdao Statistical Institute, China

CPS1287-28: A Nonparametric test for intervention effect in Markov Regime switching model
Mara Sherlin Dela Pena Talento, Institute of Statistics, University of the Philippines Los Banos

CPS1492-29: Determinants of student satisfaction in higher education: A case of the UAE University
Ali S. Gargoum, UAE University

CPS2179-30: A local dynamic multipollutant air quality indicator
Giuliana Passamani, University of Trento, Italy

CPS1338-31: Modelling survival time data with competing risk: A simulation study
Olubimpe Mercy Oladuti, Federal University of Technology, Akure, Nigeria

CPS1344-32: Determinants of under-five children hunger index in Indonesia
Yuliana Livi Andam Putri, Badan Pusat Statistik Indonesia

CPS1455-33: Some modified ratio estimators for finite population mean in survey sampling
Showkat Maqbool, SK University of Agricultural Sciences and Technology of Kashmir, India

CPS1296-34: The impact of ICTS on social & economic development case study: E-Census of Population in Egypt (2017)
Doaa Abdelkhalek Mohammed Abdelkhalek, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS743-35: The modelling of Human Development Index (HDI) in Papua-Indonesia using Geographically Weighted Ridge Regression (GWRR)
Dewi Retno Sari Saputro, Universitas Sebelas Maret, Indonesia

CPS1129-37: Efficient estimators using characteristics of Poisson distribution
Prayas Sharma, University of Petroleum and Energy Studies, India

CPS704-38: Proportional odds of nutritional status of under-five children in Nigeria indexed by MUAC
Anthony Ekpo, University of Agriculture, Makurdi, Nigeria

CPS1486-39: Ratio type estimators for finite population mean using non-conventional location parameters in survey sampling
Tariq Ahmad Raja, SK University of Agricultural Sciences and Technology of Kashmir, India

CPS1489-40: Pattern, Prevalence and predictors of immunization among children in India: A spatial comprehensive evaluation
Nilima Nilima, Manipal Academy of Higher Education, Manipal, India

CPS1926-41: Analysis of panel data
Ahmed Maher Amin, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS2017-42: An approach to automating error removal from yield maps
Jaime Andrés Vega Becerra, Universidad Nacional De Córdoba, Argentina (CONICET)

CPS2208-43: Food Inflation, job misery, and hunger incidence in the Philippines: A panel data analysis
Dennis Sioson Mapa, University of the Philippines Diliman

LTDG5.10
12.50 PM – 1.45 PM - Meeting Room 304

Building and maintaining partnerships between academia and official statistics
Chair: *Jacobien Van Der Hoeven*

Associations & Special Interest Groups:
International Association for Official Statistics (IAOS), Standing Committee of Regional and Urban Statistics (SCORUS)

- What are your experiences with partnerships between academia and official statistics?
- In which areas do you see concrete opportunities for collaboration?

LTDG5.11
12.50 PM – 1.45 PM - Meeting Room 305

Official Statistics Innovation Lab
Chair: *Steven Vale*

Associations & Special Interest Groups:
International Association for Official Statistics (IAOS)

- Which recent innovation in your organisation are you most proud of?

LTDG5.12
12.50 PM – 1.45 PM - Meeting Room 306

Statistics of crime and victimisation-filling the gap
Chair: *Michael Slyuzberg*

Associations & Special Interest Groups:
International Association for Official Statistics (IAOS), International Association of Survey Statisticians (IASS)

- What are the limitations of administrative data in the area of crime and victimisation?
- What are advantages and disadvantages of Victimisation Surveys?

D5.00
2.15PM – 3.55 PM - Plenary Hall

IPS-159: Synergistic Developments of Mathematical Statistics and Stochastic Analysis
Organiser: *Hiroki Masuda*
Chair: *Kengo Kamatani*

Minimal contrast estimation of the linear fractional stable motion
Mark Podolskij, Aarhus University, Denmark

Asymptotic expansion for vector-valued random variables
Ciprian Tudor, Université de Lille 1, France

Adaptive estimation of parabolic stochastic partial differential equations
Masayuki Uchida, Osaka University, Japan

Asymptotic expansions in non-ergodic stochastic systems
Nakahiro Yoshida, University of Tokyo, Japan

D5.02
2.15 PM – 3.55 PM - Banquet Hall

IPS-134: Early Career Advice for Statisticians in the Computational Sciences, Who Are Young and Not So Young
Organiser: *Thomas William Yee*
Chair: *Rob J. Hyndman*
Discussants: *Junji Nakano, Peter Filzmoser*

My experience of teaching R programming for data science
Han-Ming (Hank) Wu, National Taipei University, Chinese Taipei

Some reflections on software-intensive statistical research
Thomas William Yee, University of Auckland, New Zealand

D5.04
2.15 PM – 3.55 PM - Conference Hall 2

IPS-216: Big Data and Big Cities
Organiser & Chair: *Punithaa Kylasapathy*

Proximity to Urban Rail Transit (URT) and its impact on housing prices
Jiun Shyan Goh, Bank Negara Malaysia

Why Big Data for housing?
Chaly Koh, Urbanmetry, Malaysia

D5.05
2.15 PM – 3.55 PM - Conference Hall 3

IPS-267: Statistical and Computational Chanllenges for Multilevel Complex "Omics" Data
Organiser: *Jin Zhou*
Chair*: Dandi Qiao*

Genetic association analysis for T2D EHR phenotyping with application to Million Veteran Program (MVP)
Hua Zhou, University of California, Los Angeles, USA

Efficient association tests for sparse genetic and genomic data in correlated samples
Han Chen, University of Texas, USA

D5.06
2.15 PM – 3.55 PM - Plenary Theatre Auditorium

STS-493: Vision on Future Data Collection for Official Statistics
Organiser & Chair: *Marcel van der Steen*

Advanced data collection – An outlook to the future
Irene Salemink, Center for Big Data Statistics (CBS), Netherlands

New data collection methods
Stéphane Dufour, Statistics Canada

Big Data at the heart of innovation in official statistics
Barry Schouten, Center for Big Data Statistics (CBS), Netherlands

D5.07
2.15 PM – 3.55 PM - Meeting Room 301

STS-566: Forecasting for Currency Demand
Organiser & Chair: *Normasita Sidek*

Forecasting banknote demand at the Reserve Bank of Australia
Richard Finlay, Reserve Bank of Australia

Forecasting currency demand: The Philippine experience
Iluminada Tapiru Sicat, Regional Operations Sub-sector Email, Philippines

Complex seasonal autoregressive model compared to machine learning methods for cash volume forecasting
Bram Bruijnis, Transtrack International, UK
Konstantin Prokopenko, Giesecke+Devriente, UK

Forecasting demand for currency
Doug Brooks, De La Rue, UK

D5.08
2.15 PM – 3.55 PM - Meeting Room 302

STS-497: Digital Economy: The Development of Industry 4.0
Organiser: *Joo Chiet Yong*
Chair: *Tng Boon Hwa*

Measuring the digital economy: Malaysia's experience
Norul Anisa Abu Safran, Department of Statistics Malaysia

Record linkage for multi-sourced statistical business register data
Maria Denise Medenilla Peña, Asian Development Bank, Philippines

The insights of e-commerce in Malaysia
Hasnah Mat, Department of Statistics Malaysia

D5.09
2.15 PM – 3.55 PM - Meeting Room 303

STS-538: Issues and Challenges in the Measurement of Cost of Living - International Perspectives
Organiser: *Rameshwar P Srivastava*
Co-organiser: *Ibrahim Sorie Yansaneh*
Chair: *Ronald Jansen*

Compilation of consumer price indices at the national level, some experiences from Africa, Asia and the Caribbean
Rameshwar P Srivastava, RPS Associates and the Royal Statistical Society, USA

Issues and challenges in the measurement of cost of living for the adjustment of salaries of expatriate officials of international organizations
Ibrahim Sorie Yansaneh, International Civil Service Commission, United Nation, USA

Challenges and opportunities for cost of living measurement in the Big Data era – Perspectives from Brazil
Pedro Luis do Nascimento Silva, The Brazilian Institute for Geography and Statistics (IBGE), Brazil

D5.10
2.15 PM – 3.55 PM - Meeting Room 304

STS-427: Bayesian Computation Methods and Inference for Differential Equation Models
Organiser & Chair: *Jaeyong Lee*
Discussant: *Seongil Jo*

Laplace approximated posterior inference for the SEIR differential equation model
Sarat C. Dass, Universiti Teknologi Petronas, Malaysia

Embedded estimation sequential Bayes learning procedures in nonlinear non-Gaussian system
Hanita Daud, Universiti Teknologi Petronas, Malaysia

Inference for the SEIR differential equation models using relaxed differential equation models
Kyoungjae Lee, University of Notre Dame, USA

D5.11
2.15 PM – 3.55 PM - Meeting Room 305

STS-490: Setting Up Collaborative Support Systems Between Academic Institutions to Enhance Delivery on Industry-Integrated Skills Development Projects
Organiser & Chair: *Delia North*

Statistics postgraduate program capacity enhancement through regional partnership
Temesgen Zewotir, University of KwaZulu-Natal (UKZN), South Africa

An industry perspective on analytics programs at degree granting institutions
Murray De Villiers, SAS Head of Global Academic Programs, North Carolina, USA

Professional statisticians/ data scientists: Who are they and how do we train them?
Pieter Juriaan De Jongh, North-West University, South Africa

Delivering industry-focused business analytics skills
Goutam Chakraborty, Spear's Business School, Oklahoma State University, USA

D5.12
2.15 PM – 3.55 PM - Meeting Room 306

CPS-54: Statistical Theory and Methodology
Chair: *Norshahida Shaadan*

CPS2182: Clustering of interval-valued data
Lynne Billard, University of Georgia, USA

CPS2474: Spatial statistics of extremes with a view towards application to extreme weather events in South Africa and other neighbouring countries in the SADC region
Daniel Maposa, University of Limpopo, South Africa

CPS2523: On moments of folded and truncated multivariate extended skew-normal distributions
Christian Eduardo Galarza Morales, Campinas State University, Brazil

CPS2520: Robust and Efficient Estimation in the Parametric Cox Regression Model under Random Censoring
Abhik Ghosh, Indian Statistical Institute, Kolkata, India

CPS1395: Sequential Monte Carlo methods in high-order Hidden Markov Models
Mouhamad Mounirou Allaya, African Institute for Mathematical Sciences, Senegal

D5.13
2.15 PM – 3.55 PM - Meeting Room 401

CPS-42: Demography
Chair: *Ezatul Nisha Abdul Rahman*

CPS1956: Detecting life expectancy anomalies in England using a Bayesian Hierarchical Model
Areti Boulieri, Imperial College, London, UK

CPS1965: The modified Lee-Carter Model with Linearized Cubic Spline Parameter Approximation for Malaysian mortality data
Dharini Pathmanathan, University of Malaya, Malaysia

CPS1970: The Lee-Carter Model: Extensions and applications to Malaysian mortality data
Nurul Aityqah Yaacob, University of Malaya, Malaysia

CPS1976: Premature cancer morbidity and mortality conditions through the epidemiological transitions - The case of Hungary, Austria and Denmark
Andras Weber, Hungarian Central Statistical Office

D5.14
2.15 PM – 3.55 PM - Meeting Room 402

CPS-43: Applications of Statistics: Indexing
Chair: *Santha Vaithilingam*

CPS1436: Index of measurement of development policies efforts
Ayikoue Honore Agbobly-Atayi, Inseed Togo

CPS1474: Operation and dynamic analysis of Chinese customer's confidence index: A survey over the past decade
Yanan Liu, Capital University of Economics and Business, China

CPS1825: Proposing additional indicators for Indonesia Youth Development Index with smaller level analysis: A study case of South Kalimantan 2018
Suryo Adi Rakhmawan, Badan Pusat Statistik Indonesia

CPS1952: A statistical modelling framework for mapping malaria seasonality
Michele Nguyen, University of Oxford, UK

CPS2143: Resource Curse Determinant in Eastern Region of Indonesia 2011-2015
Deardo Ari Persada Damanik, Morotai Island Regency Central Bureau of Statistics, Indonesia

D5.15
2.15 PM – 3.55 PM - Meeting Room 403

CPS-44: Official Statistics: Innovation and Modernization
Chair: *Siti Haslinda Mohd. Din*

CPS1071: Redesigning of the Semi-Annual Survey of Dairy Enterprises in the Philippines
Ibarra Aaron Poliquit, Philippine Statistics Authority

CPS1900: New ways to increase motivation of respondents in Hungary
Ágnes Patay, Hungarian Central Statistical Office

CPS1914: Study of the role of young entrepreneurs in creative sector era of industrial revolution 4.0 in Indonesia
Ayu Paramudita, Badan Pusat Statistik Indonesia

CPS2064: Experimental statistics: A hub for data innovation in official statistics?
Daniel Kilchmann, Swiss Federal Statistical Office (FSO), Switzerland

CPS2315: How South Africa implemented a smart census
Nele Coghe, Hexagon Geospatial, Leuven, Belgium

D5.16
2.15 PM – 3.55 PM - Meeting Room 404

CPS-08: Statistical Modelling
Chair: *Habshah Midi*

CPS1887: Modeling for seasonal pattern and trend of land surface temperature in Taiwan
Sahidan Abdulmana, Prince of Songkla University, Thailand

CPS1999: Effect of the ocean heat content on the global sea ice extent using fuzzy logic approach
Pranesh Kumar, University of Northern British Columbia, Canada

CPS2083: Robust estimation of multi - input transfer function model with structural change
Angelita Pascua Tobias, University of the Philippines

CPS2128: Subjective and community wellbeing interaction in multilevel spatial modelling framework
Wlodzimierz Okrasa, Cardinal Stefan Wyszynski University in Warsaw; Statistics Poland

CPS2135: Multilevel time series modeling of mobility trends in the Netherlands for small domains
Sumonkanti Das, Maastricht University, Netherlands

CPS2244: Automatic time series modeling in the presence of outlier

Meri Andani Rosmalawati, Universitas Padjadjaran, Indonesia

D5.17
2.15 PM – 3.55 PM - Meeting Room 405

CPS-46: Social
Chair: *Noraliza Mohamad Ali*

CPS1340: Mobility and state dependence in a labour market characterized by informality: The case of Morocco
Mustapha Ziroili, High Commission for Planning, Morocco

CPS1345: The construction of composite index to measure accessibility, quality and people behavior of drinking water in Indonesia
Hanin Rahma Septina, Badan Pusat Statistik Indonesia

CPS1469: The impact of January 25th, 2011 revolution on the political participation of women in Egypt
Shaimaa Salah Hussien, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS1901: Performance measurement of MGNREGA and its variation
Udaya Shetty, Directorate of Economics & Statistics, Govt. of Karnataka, India

CPS2024: Paid employees earning segmentation by educational attainment
Noor Ismawati Mohd Jaafar, University of Malaya, Malaysia

D5.18
2.15 PM – 3.55 PM - Meeting Room 406

CPS-47: Bayesian
Chair: *Adriana Irawaty Nur Ibrahim*

CPS1110: Bayesian inversion into soil types with Kernel-Likelihood Models
Selamawit Serka Moja, Hawassa University, Ethiopia

CPS1158: Bayesian Inference of Multiple Structural Breaks in Multiple Regimes Threshold Autoregressive Model
Jitendra Kumar, Central University of Rajasthania, India

CPS1255: Predicting the number of newly found rare species
Tsung-Jen Shen, National Chung Hsing University, Chinese Taipei

CPS1845: Bayesian network for risk management of earthquake damage using R and Genie
Devni Prima Sari, Gadjah Mada University, Indonesia

CPS1991: Bayesian monitoring of high-yield processes using different loss functions
Amita Baranwal, Banaras Hindu University, Varanasi, India

CPS2104: Bayesian Generalized Linear Model for difference of over or under dispersed counts
Andrew W Swift, University of Nebraska at Omaha, USA

D5.19
2.15 PM – 3.55 PM - Meeting Room 407

CPS-13: Official Statistics: Economy
Chair: *Kanageswary Ramasamy*

CPS1266: Improving the quality of official statistics in Iran's manufacturing establishments statistics
Sayeed Fayaaz, Statistical Center of Iran

CPS1294: Causality model using Vector Error Correction Model (VECM) against growth of Micro, Small, and Medium Entrepreneurs (MSMES) in Indonesia period 2014-2018
Ferdinand David Aritonang, Badan Pusat Statistik Indonesia

CPS1409: Physical vs economic distance, the defining spatial autocorrelation of Per Capita GDP among 38 cities/ regencies in East Java
Rahma Fitriani, University of Brawijaya, Indonesia

CPS1888: Transforming Stats NZ's quarterly financial statistics using administrative data
Chen Chen, Statistics New Zealand

CPS1997: Integration of Economic Establishments Data into a uniquely identified comprehensive frame in Egypt
Rawia Wagih Abd Elmagid Elsayed Ragab, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

D5.20
2.15 PM – 3.55 PM - Meeting Room 408

CPS-49: Official Statistics: Census
Chair: *Rozita Talha*

CPS1278: An application of the Generalized Lavallee-Hidiroglou Algorithm for Stratification in Business Surveys: A sampling methodology for the census of the Philippine Business and Industry
Desiree Ramones Robles, Philippine Statistics Authority

CPS1824: Cross-sectional weighting methodology for the Korean population census longitudinal study
Sanggi Lee, Statistics Korea

CPS2022: Integration of traditional and technological advancement tools in the first national economic census 2018 of Nepal: Problems, challenges and prospects for developing economic statistical infrastructure
Mahesh Chand Pradhan, Central Bureau of Statistics, Nepal

CPS2087: Outlines of SCAD's pilot test for the 2020 register based census
Aisha Turki Al Ali, Statistics Centre Abu Dhabi, UEA

CPS2147: Digital transformation on population and housing census of Malaysia 2020
Hamka Ismail, Department of Statistics Malaysia

CPS2188: The study on the potential impact of mobile technology on data quality that would be achieved in the Egypt Economic Census 2019
Said Kamal Mohammed, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

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D5.21
2.15 PM – 3.55 PM - Meeting Room 409

CPS-09: Statistical Theory and Methodology
Chair: *Rossita Mohamad Yunus*

CPS1442: Two-way median test
Chinwendu Alice Uzuke, Nnamdi Azikiwe University, Nigeria

CPS1216: Parameter estimation for misspecified diffusion processes with noisy, nonsynchronous observations
Teppei Ogihara, The Institute of Statistical Mathematics, Japan

CPS1275: Asymptotic normality for a semi-parametric estimator of the gini coefficient
Tchilabalo Abozou Kpanzou, University of Kara, Togo

CPS1307: Latin Square Designs: Causal inference in a potential outcomes framework
Rahul Mukherjee, Indian Institute of Management Calcutta, India

CPS1497: Parameter estimation for the extended growth curve model under multivariate skew normal distribution
Sayantee Jana, Indian Institute of Management, Nagpur

D5.22
2.15 PM – 3.55 PM - Meeting Room 410

CPS-51: Official Statistics: Economy
Chair: *Jamia Aznita Jamal*

CPS1385: Evaluating economic performance of Egypt (epi): Before and after revolution 2011
Hagar Emadeldin Ali, Central Agency for Public Mobilization and Statistics (CAPMAS), Egypt

CPS1964: Export competitiveness of Sumatera palm oil
Wahyu Dewati, Bank Indonesia

CPS2037: Comparing the household final consumption expenditure in national accounts to the household budget survey - or vice versa?
Katri Soinne, Statistics Finland

CPS2041: Contribution and growth of selected economic activities in the non-oil real GDP in the Emirate of Abu Dhabi 2008-2017
Wadeema Mohamed Alkhoori, Statistics Centre Abu Dhabi, UEA

CPS2172: Exploring the economic effects of education: A satellite account approach
Yan Zheng, Zhejiang University of Finance & Economics, China

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