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| 16:30 | 312 | Latest Results of Searches for Point and Extended Sources with Time Independent and Time Dependent emissions of Neutrinos with the IceCube Neutrino Observatory <i>Asen Christov (i)</i> |
| 17:00 | 313 | High resolution 3D-simulations of galactic cosmic ray propagation using GALPROP <i>Michael Werner</i> |
| 17:15 | 314 | The cosmological constant puzzle: Vacuum energies from QCD to dark energy <i>Steven Bass</i> |
| 17:30 | 315 | Numerical 3D-hydrodynamic modelling of colliding winds in massive star binaries: particle acceleration and gamma-ray emission <i>Klaus Reitberger</i> |
| 17:45 | 316 | High precision tests of the Pauli Exclusion Principle for Electrons at LNGS <i>Johann Marton</i> |
| 18:00 | 317 | Search of neutrinoless double beta decay with the GERDA experiment <i>Giovanni Benato</i> |
| 18:15 | 318 | qBounce: A quantized frequency reference with gravity-resonance-spectroscopy <i>Gunther Cronenberg</i> |
| 18:30 | | Postersession and Apéro |
| 20:00 | | Public Lecture |

Thursday, 05.09.2013, HS 6

| Time | ID | III: PROTONS AND NEUTRONS <i>Chair: Johann Marton, ÖAW Wien</i> |
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| 13:30 | 321 | Spectroscopy apparatus for the measurement of the hyperfine structure of antihydrogen <i>Chloe Malbrunot (i)</i> |
| 14:00 | 322 | A progress report on detector and analysis development for the Hbar-HFS experiment within the ASACUSA collaboration <i>Clemens Sauerzopf</i> |
| 14:15 | 323 | Beamline Simulations for cold Antihydrogens <i>Bernadette Kolbinger</i> |
| 14:30 | 324 | Gravitational interaction of antihydrogen: the AEgIS experiment at CERN <i>Michael Doser</i> |
| 14:45 | 325 | Design of the downstream interface in the AEgIS beamline <i>Sebastian Lehner</i> |
| 15:00 | 326 | Ultracold neutrons for fundamental physics experiments at the Paul Scherrer Institute <i>Bernhard Lauss (i)</i> |
| 15:30 | | Coffee Break |
| | | IV: PROTONS AND NEUTRONS, FLAVOR PHYSICS <i>Chair: Christoph Schwanda, ÖAW Wien</i> |
| 16:00 | 331 | Comparison of the Larmor precession frequencies of ^{199}Hg and ultracold neutrons in the nEDM experiment at PSI <i>Beatrice Franke</i> |
| 16:15 | 332 | Vector Cesium Magnetometer for the nEDM Experiment <i>Samer Afach</i> |
| 16:30 | 333 | The future neutron beta decay facility PERC <i>Jacqueline Erhart</i> |
| 16:45 | 334 | Tailoring of polarised neutron beams by means of spatial magnetic spin resonance <i>Erwin Jericha</i> |
| 17:00 | 335 | Flavour GUT models with $\theta_{13}^{\text{PMNS}} = \theta_c / \sqrt{2}$ <i>Constantin Sluka</i> |

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| 17:15 | 336 | Angular analysis of $B_d \rightarrow K^* \mu^+ \mu^-$ with the ATLAS detector <i>Emmerich Kneringer</i> |
| 17:30 | 337 | Measurement of $B(B_s^0 \rightarrow J/\psi \phi)$, $B(B_s^0 \rightarrow J/\psi f_2(1525))$ and $B(B_s^0 \rightarrow J/\psi K^* K^-)$ and a determination of the $B_s^0 \rightarrow J/\psi \phi$ polarization at the Belle experiment <i>Felicitas Thorne</i> |
| 17:45 | 338 | Measurement of $ V_{cb} $ through exclusive semileptonic $B \rightarrow D^1 \nu$ decays with a tagged fully reconstructed B meson at the Belle experiment <i>Robin Glattauer</i> |
| 18:00 | 339 | Monte Carlo simulation for Kaonic deuterium studies <i>Carolina Berucci</i> |
| 18:15 | | |
| 18:30 | | Postersession and Apéro |
| 20:00 | | Conference Dinner |

Friday, 06.09.2013, HS 6

| Time | ID | V: LHC PHYSICS II AND DETECTORS <i>Chair: Rainer Wallny, ETH Zürich</i> |
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| 13:30 | 341 | Measurement of Charged Particle Multiplicities with the ATLAS detector at the LHC <i>Wolfgang Lukas</i> |
| 13:45 | 342 | Jet production in association with a Z boson at CMS <i>Andrea Carlo Marini</i> |
| 14:00 | 343 | The Readout System of the Belle II Silicon Vertex Detector <i>Richard Thalmeier</i> |
| 14:15 | 344 | Interstrip capacitance of double sided silicon strip detectors <i>Bernhard Leitl</i> |
| 14:30 | 345 | Over Saturation Behaviour of SiPMs at High Photon Exposure <i>Lukas Gruber</i> |
| 14:45 | 346 | FLUKA studies of hadron-irradiated scintillating crystals for calorimetry at the High-Luminosity LHC <i>Milena Quittnat</i> |
| 15:00 | 347 | Studies of radiation hardness of diamond strip trackers. <i>Felix Bachmair</i> |
| 15:15 | 348 | Irradiation Studies with the New Digital Readout Chip for the Phase I Upgrade of the CMS Pixel Detector <i>Jan Hoss</i> |
| 15:30 | | END |

| ID | NUCLEAR, PARTICLE- AND ASTROPHYSICS POSTER |
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| 351 | Measurement of the thermal neutron flux at the source for ultracold neutrons at the Paul Scherrer Institute <i>Dieter Ries</i> |
| 352 | An uncompensated magnetic field drifts in a search for an electric dipole moment of the neutron (nEDM) carrying out at Paul Scherrer Institute (PSI). <i>N Prashanth Pataguppi</i> |
| 353 | High-volume production of Silicon strip detectors for particle physics experiments <i>Thomas Bergauer</i> |
| 354 | Bethe-Salpeter Description of Light Pseudoscalar Mesons <i>Wolfgang Lucha</i> |
| 355 | Lock-in based detection scheme for a hydrogen beam <i>Michael Wolf</i> |
| 356 | Spin polarized atomic hydrogen beam source <i>Martin Diermaier</i> |

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| 16:45 | 334 | <p style="text-align: center;">Tailoring of polarised neutron beams by means of spatial magnetic spin resonance</p> <p style="text-align: center;"><i>Erwin Jericha, Christoph Gösselsberger, Michael Bacak, Stefan Baumgartner, Bernhard Berger, Dominic Blöch, Roman Gergen, Andreas Hawlik, Bernhard Hinterleitner, Robert Raab, Matthias Schmidtmayr, Maximilian Zach, Gerald Badurek TU Wien, Atominstitut, Stadionallee 2, AT-1020 Wien</i></p> <p>We present a novel type of neutron spin resonator for precise wavelength selection and definition of the time structure of neutron beam. Thereby the temporal structure is completely decoupled from the wavelength resolution and allows for almost arbitrarily shaped neutron pulses by purely electronic means. We designed prototypes consisting of individually ultra-fast switchable stages for the generation of neutron pulses in the microsecond regime. These resonators have been installed at a polarised neutron beamline at the 250 kW TRIGA reactor of the Vienna University of Technology and at the VCN beam line at the ILL, Grenoble. Here, we present the related measurements.</p> |
| 17:00 | 335 | <p style="text-align: center;">Flavour GUT models with $\theta_{13}^{\text{PMNS}} = \theta_c / \sqrt{2}$</p> <p style="text-align: center;"><i>Constantin Sluka, Stefan Antusch, Christian Gross, Vinzenz Maurer, Department Physik, Universität Basel, Klingelbergstrasse 82, CH-4056 Basel</i></p> <p>We discuss supersymmetric SU(5) GUT models with an A4 flavour symmetry -- including a full flavon- and messenger sector -- which, in the spirit of our recent paper "Nucl.Phys. B866 (2013) 255-269", realize the relation $\theta_{13}^{\text{PMNS}} = \theta_c / \sqrt{2}$. In addition to predictions for the neutrino sector, the models feature quark CP violation with a right-angled unitarity triangle and light quark masses which result from a specific set of Clebsch factors from GUT symmetry breaking. We present detailed Monte Carlo Markov Chain fits and highlight the model predictions.</p> |
| 17:15 | 336 | <p style="text-align: center;">Angular analysis of $B_s \rightarrow K^* \mu^+ \mu^-$ with the ATLAS detector</p> <p style="text-align: center;"><i>Emmerich Kneringer, Patrick Jussel, Anna Usanova Institute for Astro and Particle Physics, University of Innsbruck, Technikerstr. 25, AT-6020 Innsbruck</i></p> <p>Besides the rare decay $B_s \rightarrow \mu^+ \mu^-$ also the semi-rare decay $B_s \rightarrow K^*(K, \pi) \mu^+ \mu^-$ has some potential to show deviations from the Standard Model. Therefore we analysed this four charged particle final state using data that has been recorded by the ATLAS experiment at the LHC. Results will be presented and compared with similar analyses done by other LHC experiments as well as with the expectations from the Standard Model.</p> |
| 17:30 | 337 | <p style="text-align: center;">Measurement of $B(B_s^0 \rightarrow J/\psi \phi)$, $B(B_s^0 \rightarrow J/\psi f_2(1525))$ and $B(B_s^0 \rightarrow J/\psi K^+ K^-)$ and a determination of the $B_s^0 \rightarrow J/\psi \phi$ polarization at the Belle experiment</p> <p style="text-align: center;"><i>Felicitas Thorne, Christoph Schwanda Inst. of High Energy Physics, Austrian Academy of Science, Nikolsdorfergasse 18, AT-1050 Vienna</i></p> <p>We study the decays $B_s^0 \rightarrow J/\psi \phi$, $B_s^0 \rightarrow J/\psi f_2(1525)$ and $B_s^0 \rightarrow J/\psi K^+ K^-$ using a 121.4 fb^{-1} data sample collected at the $\Upsilon(5S)$ resonance with the Belle detector at the KEKB asymmetric-energy e^+e^- collider. The decay $B_s^0 \rightarrow J/\psi \phi$ is an important mode for measuring the CP violating phase β_s in the $B_s \bar{B}_s$ mixing, which is expected to be sensitive to physics beyond the Standard Model. In this context, a more detailed understanding of contributions to the decay $B_s^0 \rightarrow J/\psi K^+ K^-$ is of particular interest. Besides the measurement of the absolute branching ratios of the above mentioned decays, we also calculate the S-wave contribution within the ϕ mass region by separating the final states $B_s^0 \rightarrow J/\psi \phi$ and $B_s^0 \rightarrow J/\psi K^+ K^-$ and determine the polarization of the decay $B_s^0 \rightarrow J/\psi \phi$.</p> |
| 17:45 | 338 | <p style="text-align: center;">Measurement of V_{cb} through exclusive semileptonic $B \rightarrow D l \nu$ decays with a tagged fully reconstructed B meson at the Belle experiment</p> <p style="text-align: center;"><i>Robin Glattauer, Christoph Schwanda Institute of High Energy Physics, Nikolsdorfer Gasse 18, AT-1050 Wien</i></p> <p>The weak transition of quarks into each other is determined by the CKM matrix. In order to measure the entry V_{cb}, which governs decays of bottom quarks to charm quarks, we study the decay $B \rightarrow D l \nu$ ($l = e, \mu$) at the $\Upsilon(4S)$ resonance at the Belle experiment. $\Upsilon(4S)$, being only slightly above two masses of B, grants high numbers of events with B meson pairs. To highly reduce the background of our study we reconstruct not only the signal, but the second B as well. Through a fit of the decay rate for different kinematic regions we determine V_{cb}.</p> |