

Monday 07th Oct	Lecture/ Invited Talk	Topic/Speaker
08:00 – 09:20	Registration	
09:20 – 09:30	Prof. Sven Hofling	Welcome and opening remarks
09:30 – 10:00	Prof. Wegscheider (ETH-Zurich)	Highest-mobility arsenide and antimony-based heterostructures
10:00 – 10:15	Sebastian Schmid (JMU Würzburg)	Topological insulators based on TQW structures
10:15 – 10:45(a)	Coffee break/registration	Wafer Technology, nextnano
10:45 – 11:00	Dr. Robert Weih (nanoplus)	Inter-band Cascade lasers grown by molecular beam epitaxy
11:00 – 11:15	Maximilian Beiser (TU Wien)	Frequency comb generation based on Inter-band Cascade lasers
11:15 – 11:30	Miriam Giparakis (TU Wein)	Selective Emission of a THz QCL using a Magnetic Field
11:30 – 11:45	Philipp Gribisch (Institut für Materialien und Bauelemente der Elektronik Leibniz Universität Hannover)	Investigations on novel crystal structures in Gd ₂ O ₃ thin films grown on Si(001)
12:00 – 14:00	Lunch/registration (MSL)	Riber, Episerve, DCA
14:00 – 14:30	Prof. Brunner (JMU Würzburg)	Topological Insulator Materials: MBE, structural and electronic properties
14:30 – 15:15	Dr. Peter Schüffelgen (Forschungszentrum Jülich)	Selective area growth and stencil lithography for topological quantum devices
14:45 – 15:00	Dr. Gregor Mussler (Forschungszentrum Jülich)	MBE growth of dual topological insulator Bi ₁ Te ₁ and 2D topological insulator Bi ₄ Te ₃
15:00 – 15:15	Micheal Schleenvoigt(Forschungszentrum Jülich GmbH)	UHV Lithography for STM Investigations of 3D Topological Insulators-Superconductor Hybrid Arrays
15:15 – 15:45	Coffee break	Scienta Omicron GmbH, abcr GmbH
15:45 – 16:00	Dr. Arne Ludwig (Ruhr-Universität Bochum)	Epitaxial alignment of quantum dots
16:00 – 16:15	Dr. Wolfgang Braun (Max-Planck-Institut für Festkörperforschung)	Thermal Laser Epitaxy
16:15 – 16:30	Tanja Finke (Institut für Nanostrukturtechnologie und Analytik, Kassel)	GaAs based quantum dot structures for VECSEL and MIXSEL applications
16:00 – 16:45	Dr. Christian Schneider(JMU Wuerzburg)	Growth and Technology aspects in the implementation of GaAs-based Semiconductor Single Photon Sources
16:45 – 18:45	Poster session, lab tour (MSL)	
19:00 –	Workshop dinner(Juliusspital)	

Program-Tuesday

Tuesday 08th Oct	Lecture/ Invited Talk	Topic/Speaker
09:00 – 09:30	Prof. Böhm (TUM)	InP- and GaSb-based VCSELs suitable for gas-sensing experiments in the wavelength range 2-4 μm
09:30 – 09:45	Yvo Barnscheidt (Institut für Materialien und Bauelemente der Elektronik Leibniz Universität Hannover)	Filtering Threading-Dislocations in Ge/Si Heteroepitaxy by the Introduction of Carbon Delta Layers
09:45 – 10:00	Dr. Alexander Pawlis (Peter Grünberg Institut PGI-9, Forschungszentrum Jülich GmbH)	MBE Growth and Optical Properties of Isotopically Purified ZnSe Heterostructures
10:00 – 10:15	Dr. Martin Heilmann (Paul-Drude-Institut, Berlin)	Substrate-related influences on van der Waals epitaxy of hexagonal boron nitride on graphene
10:15 – 10:45	Coffee break	RTA Instruments Ltd, VBL Sprl
10:45 – 11:00	Dr. Piero Mazzolini (Paul-Drude-Institut, Berlin)	Molecular Beam Epitaxy of (010) β -Ga ₂ O ₃ Homoepitaxial Thin Films
11:00 – 11:15	Pujitha Perla (Peter Grünberg Institut PGI-9, Forschungszentrum Jülich GmbH)	Fabrication of In-situ Josephson contacts on InAs nanowires
11:15 – 11:30	Dr. Stephan Farrel (Veeco Inc.)	Development of a High-Purity, High-Concentration Ozone Delivery System and Safety Considerations for MBE Growth of Oxide Materials
11:30 – 11:45	Wenische (AIM Infrarot-Module GmbH)	MBE Technology at AIM
11:45 – 12:00	Prof. Sven Höfling	Closing remarks, next DEMBE announcement
12:00 – 14:00	Lunch, lab visits (MSL), and departure	VEECO, STAIB INSTRUMENTS GmbH, MBE Komponenten



dembe2019

DEMBE 2019

The German MBE Workshop 2019 will be organized by the Chair for Technical Physics (TeP) and will take place from October 7th to 8th, 2019, at the University of Würzburg.

In recent years, a lot of progress has been made at the University of Würzburg regarding various fields of material physics. Topological insulators, quantum dots and micro-cavities are just a few research areas where Würzburg has been at the forefront thanks to its state of the art materials growth labs with MBE at their core.

Continuing the longstanding tradition of an annual meeting for the German speaking MBE community, TeP would like to welcome you at the University of Würzburg once again after 20 years since the last DEMBE was held here. Our main objective is to provide a platform for young researchers, where they can present their work and discuss it with leaders in their respective fields.

Conference Scope

- MBE Fundamentals
- Semiconductor Heterostructures
- Emerging Materials (Oxides, Topological Insulators, ...)
- Nanostructures (Quantum Dots, Quantum Wells, Nanowires, ...)
- Devices and Applications
- MBE in Production and Industry (Advances in MBE Components)

Important Dates

- Oct 7th - 8th; Workshop

Contact

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