

MAT science Week (24-April 27, 2018)**Workshop location: KBW building**

Tuesday, April 24, 2018		Wednesday, April 25, 2018		Thursday, April 26, 2018		Friday, April 27, 2018	
AM	10:00 --- Registration ---	08:45 Mat Science Week - Session 4	08:45 Mat Science Week - Session 8	09:00 Mat Science Week - Session 12			
10:30	Mat Science Week - Session 1	08:45 Optical metasurfaces created by ion irradiation of phase transition materials - Jura Rensberg (Friedrich-Schiller-Universität Jena)	08:45 Material modifications under extreme conditions delivered by swift heavy ions - Marcel Toulemonde (CIMAP-GANIL)	09:00 TEM investigations of structural and chemical order in III-N semiconductors irradiated by swift heavy ions - Jean Gabriel Mattei (CIMAP)			
10:30	Welcome	09:05 Secondary Ion and Neutral Mass Spectrometry with Swift Heavy Ions and Highly Charged Ions - Lars Breuer (Universität Duisburg-Essen)	09:15 Structural Transformations Induced at Extreme Conditions: Coupling High-Pressure Cells with Energetic Ion Beams - Maik Lang (University of Tennessee)	09:20 Heavy ion-induced gas desorption in accelerators - Markus Bender (GSI, Darmstadt)			
10:50	Polymer membranes analyzed by Elastic Recoil Detection and Positron Annihilation Lifetime Spectroscopy - Günther Dollinger (Angewandte Physik und Messtechnik, Universität der Bundeswehr München, Neubiberg, Germany)	09:25 Abnormal lattice location and electrical activation in chalcogen-hyperdoped Si - Mao Wang (Helmholtz-Zentrum Dresden-Rossendorf)	09:45 High pressure devices: Design, performance & applications - Stefan Klotz (Université P&M Curie)	09:40 Photothermal radiometry study of heavy ion beam induced modification of polycrystalline graphite thermal properties - Alexey Prosvetov			
11:10	Plasmonic nanostructures prepared by ion track technology and electrodeposition - Ina Schubert (GSI, Darmstadt)	09:45 Change of Ar diffusion coefficient in glass by heavy ion irradiation - Tieshan Wang (School of Nuclear Sciecne and Technology, Lanzhou University, Lanzhou, China)	10:15 --- Coffee ---	10:00 Swift heavy ion irradiation damage in advanced nanostructured alloys - Sergey Rogozhkin (Institute for Theoretical and Experimental Physics named by A.I. Alikhanov of National Research Centre «Kurchatov Institute»)			
11:30	Ion track-based nanostructures for tuning plasmonic and electrical properties - Jinglai Duan (Materials Research Center, Institute of Modern Physics, Chinese Academy of Sciences) Jie Liu (Institute of Modern Physics, Chinese Academy of Sciences)	10:05 (Bio)molecular detection with track-etched single synthetic ion channel - Mubarak Ali (Technische Universität(TUDA))	10:45 Mat Science Week - Session 9	10:20 --- Coffee ---			
11:50	Analysis of the Electric-Double-Layer formation by in-situ Rutherford Backscattering Spectrometry - Nasrin Baghban Khojasteh (Ion Beam Center, Institute of Ion Beam Physics and Materials Research, HZDR)	10:25 --- Coffee ---	10:45 Time-resolved measurements at high pressures using diamond anvil cells - Zuzana Konôpková (European XFEL GmbH)	10:50 Mat Science Week - Session 13			
12:10	Single-ion-induced surface modifications on H/Si(001) - significant difference between slow highly charged and swift heavy ions - Michael Dürr (Justus-Liebig-Universität Gießen(JULGi))	11:00 Mat Science Week - Session 5	11:15 Equation of state for strong compression - Wilfried B. Holzapfel (Department of Physics University Paderborn)	10:50 Heavy Ion Radiation Effects on Hafnium Oxide based Resistive Random Access Memory - Stefan Petzold (TU Darmstadt - Materials Science - Advanced Thin Film Technology)			
12:30	--- Lunch ---	11:00 Development of In-situ X-Ray Diffraction Measurements during Low Energy Ion Beam Etching - Darina Manova (Leibniz-Institut für Oberflächenmodifizierung (IOM) e.V.)	11:45 "High pressure" (tba) - Reinhard Boehler	11:10 Space Radiation Environment and Effects at LIP - Jorge SAMPAIO (Laboratório de Instrumentação e Física Experimental de Partículas)			
		11:20 Simulation of Ion Beam induced Surface Dynamics - Alrik Stegmaier (2. Physik, Universität Göttingen)	12:15 Discussion	11:30 "Shock synthesis on radiation damaged samples - A new field for investigation?" - Thomas Schlothauer (Technische Universität Bergakademie Freiberg)			
		11:40 Counterintuitive temperature dependence of ion beam shaping of Si nanopillars - Karl-Heinz Heinig (HZDR)	12:45 --- Lunch ---	11:50 Discussion			
		12:00 Application of ion beams to fabricate and tune ferromagnetic semiconductors - Shengqiang Zhou (Helmholtz-Zentrum Dresden-Rossendorf)		12:30 End of Workshop			
		12:20 Group Photo (until 12:40)					
		12:40 --- Lunch ---					
PM	14:00 Mat Science Week - Session 2	14:15 Mat Science Week - Session 6	14:15 Mat Science Week - Session 10				
14:00	Development of an efficient high-current ion source for Accelerator Mass Spectrometry - Hans Hofäss (University Göttingen)	14:15 Materials Research irradiation facilities at GSI/Fair - Daniel Severin (GSI, Darmstadt)	14:15 Acoustic energy loss measurements of GeV ions - Walter Assmann (Ludwig-Maximilians-Universität München, Garching, Germany)				
14:20	Detecting Beryllium-10 from exotic decays by Accelerator Mass Spectrometry (AMS) - Oliver Forstner (FSU Jena, HI Jena)	14:45 GSI Tour	14:45 Avalanches and crackling noise - Eckhard Salje (University of Cambridge)				
14:40	Beryllium-7 at DREsdn Accelerator Mass Spectrometry - Georg Rugel (Helmholtz-Zentrum Dresden-Rossendorf)	16:45 --- Coffee ---	15:15 Swift heavy ion-irradiated calcite (CaCO3) analyzed by UV-C Laser excited Fluorescence-Spectrometry - Ulrich Anton Glasmacher (Institute of Earth Sciences, University Heidelberg)				
15:00	Production and Characterization of the 163Ho Source for the ECHo Project - Klaus Wendt (University of Mainz)	17:15 Mat Science Week - Session 7	15:35 Discussion				
15:20	KFSI-Meeting (until 16:20), Postersession, and Coffee	17:15 Welcome by Scientific Director of GSI/FAIR - Paolo Giubellino	16:30 --- Coffee ---				
17:00	Mat Science Week - Session 3	17:45 Enabling in situ diffraction and imaging studies during heavy relativistic ion irradiation and studies of photon-ion interactions: A „Compact Light Source @ SIS 100 @ FAIR - Bjoern Winkler (Goethe Universität)	17:00 Mat Science Week - Session 11				
17:00	Particle Ejection from an Energized Track: Comparison with the Nuclear Sputtering Process - Andreas Wucher (University Duisburg-Essen)	18:05 1-10 MeV/u cw-heavy ion beams at GSI - Maksym Miski-Oglu (GSI, Darmstadt)	17:00 Verification of velocity effect in yttrium iron garnet by HR-STEM observations of latent tracks. - Maxim Saifulin (FLNR, JINR)				
17:20	Investigations and modifications of selected thin films by 1-2 MeV rare-gas ion beams - N.-T.H. Kim-Ngan (Nanostructure Laboratory, Institute of Physics, Pedagogical University, Podchorazych 2, 30-084 Cracow, Poland)	18:25 PRIOR - Proton Microscope for FAIR - Dmitry Varentsov (GSI, Darmstadt)	17:20 Structural and mechanical properties modifications induced in α-Al2O3 under swift heavy ions - Alexis RIBET (CIMAP)				
17:40	An energy and mass selective hyperthermal ion beam for ion-assisted thin film deposition purposes - Jürgen W. Gérlich (Leibniz-Institut für Oberflächenmodifizierung e.V., Leipzig, Germany)	18:45 Plasma physics at FAIR using intense ion and laser beams - Paul Neumayer (GSI, Darmstadt)	17:40 Radiolysis of nucleobases under heavy ion irradiation: scaling laws for radio-resistance - Aditya Narain Agnihotri (Centre de Recherche sur les Ions, les Matériaux et la Photonique CIMAP, GANIL, CEA/CNRS/ENSICAEN/UNICAEN, Caen, France)				
18:00	Layer stability and interface properties of single- and bi-layer magnetite films grown on MgO(001) substrates - Magdalena Krupska (Nanostructure Laboratory, Institute of Physics, Pedagogical University, Podchorazych 2, 30-084 Cracow, Poland)	19:15 --- Dinner (GSI Canteen) ---	19:30 --- Dinner Restaurant Weißer Schwan --- (Frankfurter Landstraße 190, Darmstadt-Arheilgen)				
18:20	Applying an Evolutionary Algorithm for Automated Ion Beam Analysis Data Evaluation - René Heller (Helmholtz-Zentrum Dresden-Rossendorf)						
19:00	--- Dinner (GSI Canteen) ---						