



Program of RACIRI Summer School 2015, 22.-29.8.2015, Rügen Island
Focus Theme: Time-resolved and In-situ Studies of Materials - Basics and Applications

Cliff Hotel Rügen, Cliff am Meer 1, 18586 Ostseebad Sellin (Navi: Siedlung am Wald 22a)

Program chair: Günter Kaindl



Time	Saturday 22.8.	Sunday 23.8.	Monday 24.8.	Tuesday 25.8.	Wednesday 26.8.	Thursday 27.8.	Friday 28.8.	Saturday 29.8.	
07:00-08:30	BREAKFAST								
08:30-10:30	Welcome Addresses	Hartmut Zabel Basics of X-ray and neutron scattering - magnetic scattering	Anatoly Balagurov Real-time studies of materials and processes at pulsed neutron sources	Johan Gustafson High-energy X-ray diffraction for fast surface structure analysis	Andrew Higginbotham Shock-compressed matter under extreme conditions	Andreas Stierle In-situ X-ray studies of nano particle model catalysts	Check out & Departure		
10:30-11:00	Helmut Dosch Introductory Talk	Hubert Ebert Electronic structure of highly correlated materials	Christian Schroer X-ray microscopy and tomography - sharp views into the nano-cosmos	Martin Wolf Transient electronic structures in ultra-fast surface reactions	Boris Sharkov FAIR - creation of extreme states of matter as from Big Bang to the present	Giacomo C. Ghiringhelli RIXS for the study of strongly correlated electron systems			
11:00-13:00	Coffee & Tea								
11:00-13:00	Alexander Ioffe Nuclear-fission and spallation neutron sources	Kai Rossnagel Time-resolved ARPES of correlated electron materials	Matthias Kling Fast and small - attosecond phenomena on the nanoscale	Anders Nilsson Ultrafast X-ray probing reveals insight regarding the mystery of water	Tommy Nylander Biomolecular interactions at interfaces and lipid self-assembly structures	Joachim Stöhr Soft X-ray interaction with matter: resonances, dichroism, and non-linear effects			
13:00-14:30	Hartmut Zabel Basics of X-ray and neutron scattering - elastic scattering	Henrik M. Ronnow Neutron studies of highly correlated materials	Ivan Vartaniants Coherent diffraction imaging and time-resolved studies of nano-materials	Tutorials II with individual lecturers	Olaf Holderer Soft matter dynamics studied with neutron spin echo spectroscopy	Ralf Röhlsberger Quantum and non-linear optics with hard X-rays			
14:30-16:30	LUNCH			Pick-up of lunch bags		LUNCH			
14:30-16:30	Arrival & Check-in (rooms available from 16:00)	Alexei E. Voloshin In-situ X-ray and optical studies of crystal-growth processes	Albrecht Wiedenmann Stroboscopic SANS for probing nano-magnets	Marine Cotte Watching art and archaeology under synchrotron light	13:30-22:00 Excursion to Jasmund National Park followed by Rügen-style Dinner	Steven L. Johnson Femtosecond X-ray diffraction: dynamics of long-range order in materials	Henry N. Chapman Progress in X-ray protein nano-crystallography		
16:30-17:00		Hartmut Zabel Basics of X-ray and neutron scattering - inelastic scattering	Joachim Stöhr Magnetization dynamics studied with X-rays	Aleksei Zheltikov Ultrafast pump-probe spectroscopy and non-linear imaging		Anders Nilsson Chemical energy transformation at interfaces probed with X-rays	Petra Fromme Structure and dynamics of the photosystem II		
17:00-19:00		Coffee & Tea				Coffee & Tea			
17:00-19:00	Sverker Werin Synchrotron-radiation sources up to the latest developments	Tutorials I with individual lecturers		Serguei Molodtsov Complementary use of synchrotron and Free-Electron-Laser radiation	Science Slam II 10-min. presentations, including discussion		Inna P. Kuranova Growth of protein crystals in micro-gravity and their study with X-rays		
19:00-20:30	Welcome address at the beach	Science Slam I Nomination of topics and speakers		Alexander E. Blagov X-ray acousto-optics - prospects of applications	Ada E. Yonath - Keynote lecture - Bestowal of Röntgen Medal 2014		School Dinner & Awards		
20:30-22:00	Welcome Dinner	DINNER		DINNER					
		Barbecue & Social Gathering		DINNER		Poster Session I		Poster Session II	