



**RACIRI 2019 Summer School**  
**Structure, Real-time Dynamics and Processes in Complex Systems**

04. - 11.08.2019, Svetlogorsk, Russia



Time	Sunday 04.08.	Monday 05.08.	Tuesday 06.08.	Wednesday 07.08.	Thursday 08.08.	Friday 09.08.	Saturday 10.08.	Sunday 11.08.	
	Arrival	X-ray & Neutron Sources, Fundamentals of Scattering	Experimental Techniques & related Theory	Basic Science, Quantum Materials, Data Science	Cultural Excursion	Soft Matter & Life Science	Applications towards a Sustainable Development	Departure	
07:30-08:30		Breakfast							
08:30-09:30		Opening Ceremony (8.45 - 9.30)	L6 <b>Alexander Belushkin</b> Neutron techniques for the study of condensed matter	L12 <b>Alexander Soldatov</b> Local order in a disordered kingdom: insight with synchrotron radiation	Excursion to Curonian Spit & Kaliningrad (inkl. Organ Concert at Cathedral)	L18 <b>Harald Reichert</b> Hard X-rays for soft matter	L23 <b>Tatyana Feldman</b> Neutron study of visual pigment rhodopsin	Check out & Departure (before 12:00h)	
09:30-10:30		L1 <b>Introductory Lecture Mikhail V. Kovalchuk</b>	L7 <b>Anders Nilsson</b> X-ray studies of the mysteries of water	L13 <b>Hermann Dürr</b> Electron and spin dynamics		L19 <b>Sarah Koester</b> Hard X-rays for cell imaging	L24 <b>Evgeny Antipov</b> Storage batteries - progress from neutron and X-ray research		
10:30-11:00		Coffee & Tea				Coffee & Tea			
11:00-12:00		L2 <b>Vladimir Voronin</b> State-of-the-art neutron sources	L8 <b>Zahid Hussain</b> Advanced techniques in photoelectron spectroscopy	L14 <b>Hlynur Gretarsson</b> Entering the world of spin-orbit-coupled materials using RIXS		L20 <b>Jörg Pieper</b> Structure and dynamics of biomolecules studied by neutron scattering	Free time		
12:00-12:30		Group Picture	Free time				Free time	Free time	
12:30-13:30		Lunch							
13:30-14:30		L3 <b>Serguei Molodtsov</b> X-ray sources - from Röntgen's tube via SR towards XFEL facilities	L9 <b>Joseph Nordgren</b> Soft X-ray emission spectroscopy and resonant inelastic X-ray scattering	L15 <b>Marco Merlini</b> X-ray studies of matter at extreme pressures and high temperature		Excursion to Curonian Spit & Kaliningrad (inkl. Organ Concert at Cathedral)	L21 <b>Valeriya Samygina</b> Structural Biology - a weapon against disease	L25 <b>Robert Schlögl</b> Dynamics of catalysts for energy applications	
14:30-15:30	Arrival & Check-in (rooms available from 13:00h)	L4 <b>Bridget Murphy</b> Basic scattering theory I - X-rays	L10 <b>Jaques Ollivier</b> Time-resolved measurements by neutron scattering	L16 <b>Joachim Stohr</b> The nature of X-rays			L22 <b>Eleonora Shtykova</b> SAXS by stressed cells in vitro and in vivo	L26 <b>Raif Vasilov</b> Bio-economics as the basis for a sustainable development	
15:30-16:00		Coffee & Tea				Coffee & Tea			
16:00-17:00		L5 <b>Frank Schreiber</b> Basic scattering theory II - Neutrons	L11 <b>Marianne Liebi</b> Advanced imaging techniques with coherent X-rays	L17 <b>Jonathan Taylor</b> Data management and software		Tutorials IV		Tutorials V	
17:00-18:00		Tutorials I	Tutorials II	Tutorials III	SCIENCE SLAM Presentations		L27 <b>Andrey Popeko</b> Keynote Lecture 150 years of Periodic Table of elements		
18:00-19:00		Free time		Free time	Free time (or bus trip to Closing Dinner)				
19:00-20:00		Dinner							
20:00-22:00	Welcome Barbecue & Social Gathering	Poster Session I	Preparation of SCIENCE SLAM Preparation of Cultural Evening	Poster Session II	Dinner	Cultural Evening directed by the students	Closing Dinner & Awards		

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