

Nonlinear Photonics International Summer School

August 12-16, 2019, Skolkovo Institute of Science and Technology

PROGRAMME

Monday, August 12	Tuesday, August 13	Wednesday, August 14	Thursday, August 15	Friday, August 16
09:00 – 10:30 Registration & Opening				
Spatio-temporal dynamics	Photonic devices and systems	Lasers science and applications	Spectroscopy and imaging	New concepts in optical communications
10:30 – 11:30 Nikolay N. Rosanov <i>Topological laser solitons</i>	10:00 – 11:00 Dmitry Skryabin <i>Mathematics and physics of micro-resonator combs</i>	10:00 – 11:00 Pavel Mamyshev <i>Fundamentals of nonlinear fiber optics and its applications for ultrashort laser pulse generation</i>	10:00 – 10:45 Oleg Prudnikov <i>Quantum sensors based on atom-optical interferometry</i>	10:00 – 10:45 Morteza Kopae <i>A fibre-optic communication system based on the inverse scattering transform</i>
11:30 – 11:45 Coffee break	11:00 – 11:15 Coffee break	11:00 – 11:15 Coffee break	10:45 – 11:00 Coffee break	10:45 – 11:00 Coffee break
11:45 – 12:15 Alexey Balakin <i>Coherent propagation and compression of laser pulses in optical multi-core fibre</i>	11:15 – 12:15 Natalia Berloff <i>Polaritonic networks as a route to unconventional computing</i>	11:15 – 12:15 Ömer Ilday <i>Burst-mode ultrafast fiber lasers for ultra-efficient material removal in the ablation-cooled regime</i>	11:00 – 12:00 Alexey M. Zheltikov <i>Multiphoton microscopy and bio-imaging</i>	11:00 – 12:00 Ildar Gabitov <i>Riemann–Hilbert problem and nonlinearity compensation in coherent optical fiber systems</i>
12:15 – 14:00 Lunch	12:15 – 14:00 Lunch	12:15 – 14:00 Lunch	12:00 – 13:45 Lunch	12:00 – 14:00 Lunch
Quantum photonics	14:00 – 15:30 A tour through Skolkovo Innovation Centre area, Skoltech campus and CPQM Laboratories	Spatio-temporal dynamics	Spectroscopy and imaging	Emerging photonic techniques
14:00 – 14:45 Alexey Taichenachev <i>Generalized Ramsey spectroscopy of forbidden transitions for atomic clocks</i>		14:00 – 15:00 Stefan Wabnitz <i>Nonlinear optics of multimode optical fibers</i>	13:45 – 14:45 Alexander Apolonskiy <i>Mid-infrared spectroscopies for studying human bio-fluids</i>	14:00 – 14:45 Alejandro Aceves <i>Fractional Schrödinger equation in optics</i>
14:45 – 15:30 Gregory Goltsman <i>Quantum photonic integrated circuits</i>		15:00 – 15:30 Olga Kosareva <i>Nonlinear transparency window for ultra-intense femtosecond laser pulses in the atmosphere</i>	Nano-photonics	14:45 – 15:30 Anatoly Kamchatnov <i>Dispersive shock waves in nonlinear optics</i>
15:30 – 15:45 Coffee break	15:30 – 15:45 Coffee break	15:30 – 15:45 Coffee break	15:30 – 15:45 Coffee break	15:30 – 15:45 Coffee break
Networking	Meta materials	Lasers science and applications - continuation	Nano-photonics - continuation	Emerging photonic techniques - continuation
15:45 – 17:00 Networking	15:45 – 16:45 Andrei Lavrinenka <i>Hyberbolic metamaterials</i>	15:45 – 16:30 Dmitry Kolker <i>Wide-tunable OPO in mid-IR</i>	15:45 – 16:45 Boris Luk'yanchuk <i>Higher order Fano-resonances in microsphere: extreme effects in field localization</i>	15:45 – 16:30 Alexey Romanov <i>Photonics Technologies in Space Device Engineering</i>
17:00 – 19:00 Welcome reception & Poster session (Axiom pub)	16:45 – 17:15 Arkady Shipulin <i>Multipole approach for analytical modeling of nonlinear metamaterials</i>	16:30 – 17:45 Networking	16:45 – 17:45 Networking	16:30 – 17:00 Closing
	Poster session- continuation (Skoltech)		17:45 – 20:00 Conference Dinner (Matreshka restaurant)	

