

OS-2015 PROGRAM

May 18, Monday

Location: ITMO University, Kronverksky av., 49, Assembly Hall

9:00 – 10:00	Registration
10:00 – 10:30	<p>Plenary session</p> <p>Vladimir Vasiliev Opening address Chair of Programming Committee, Rector of ITMO University, Corresponding member RAS</p> <p>Vladimir Nikiforov Opening address Vice-chair of Programming Committee, Vice-rector of ITMO University</p> <p>Alexander Shehonin Opening address Vice-chair of Programming Committee, Vice-rector of ITMO University</p> <p>Darya Kozlova Opening address Director of Institute for International development and partnership, ITMO University</p> <p>Alexey Bakholdin Opening address Chair of Organizing Committee, Head of Applied and computer optics department, ITMO University</p>
10:30 – 11:00	<p>Zeev Zalevsky PhD, Director of the Nano Photonics Center at the Institute of Nanotechnology and Advanced Materials, Faculty of Engineering, Bar-Ilan University, Israel</p> <p>Super resolution and bio-photonic sensing</p>
11:00 – 11:30	<i>Coffee Break</i>
11:30 – 13:00	<p>Paul Urbach PhD, Professor, Faculty of Applied Sciences, Delft University of Technology, Netherlands New methods for optical imaging and sensing</p> <p>Jyrki Saarinen D.Sc., Professor, Institute of Photonics, University of Eastern Finland, Finland Lens 2700 years old – reinventing lens</p> <p>Gennady G. Valyavin D.Sc., Senior Researcher, Special Astrophysical Observatory of Russian Academy of Science, N. Arkhyz, Russia Exoplanetary research at Special Astrophysical Observatory</p> <p>Eduard Muslimov PhD, Assoc.Professor, OES Department, KNITU-KAI, Kazan, Russia Nadezda Pavlycheva D.Sc., Professor, OES Department, KNITU-KAI, Kazan, Russia Optical system design in education and research in KNITU-KAI</p>
13:00 – 14:00	<i>Lunch</i>
14:00 – 16:00	<p>Kimio Tatsuno PhD, Chief Senior Researcher, Koga Research Institute, Tokyo, Japan State of Japanese photonics-related industry – Digital economy is creating a deep integration in East Asia</p> <p>Hoang Yan Lin PhD, Professor, Graduate Institute of Photonics and Optoelectronics, National Taiwan University, Taiwan Study of the viewing zones of auto-stereoscopic display systems</p> <p>Daisuke Miyazaki PhD, Professor, Department of Physical Electronics and Informatics, Graduate School of Engineering, Osaka City University, Japan Floating volumetric display using retroreflective optical elements</p> <p>Kouichi Nitta PhD, Professor, Department of Systems Science, Graduate of System Informatics, Kobe University, Japan Optical imaging with single pixel measurement</p> <p>Fedor Orlov, Representative in Russia and CIS of Hamamatsu Photonics Norden AB, Russia CCD, CMOS and EmCCD cameras. Principals of operation and main characteristics</p> <p>Sergey Koreshev D.Sc., Professor, Applied and computer optics department, ITMO University Design features of holographic collimator sights</p>
16:00 – 16:20	<i>Coffee Break</i>
16:20 – 17:30	Poster-session

May 19, Tuesday

Location:	ITMO University, Grivtsova pereulok, 14 room 418	ITMO University, Grivtsova pereulok, 14 room 306a	ITMO University, Kronverksky av., д.49 room 19	ITMO University, Kronverksky av., д.49 Assembly Hall
10:00 – 11:20	<p>Master-class «Evaluation of optical system manufacturability using Zemax»</p> <p>Aleksei Garshin, Head of department of Multispectral optical system design, «Gyrooptics» JSC., Russia</p> <p>Part 1. Features of tolerancing in Zemax</p>	<p>Master-class «RSoft: Physical approach of the optical design based on Maxwell’s equations»</p> <p>Maryvonne Chalony, Optical and design engineer, «Light Tec», France</p> <p>Part 1. Introduction</p>	<p>Master-class «Methods of optical design using OOFELIE::Multiphysics and Zemax»</p> <p>Natalia Demkovich, Senior engineer, «Be Pitron SP», Russia</p> <p>Part 1. Features of OOFELIE::Multiphysics</p>	<p>Invited lecture «Optomechatronic design and 3D phase reconstruction in diffraction tomographs with active beam manipulation»</p> <p>Arkadiusz Kuś (Poland)</p>
11:20 – 11:40	<i>Coffee Break</i>			
11:40 – 13:00	<p>Part 2. Tolerancing examples and analysis of results</p>	<p>Part 2. Short Training on BeamPROP and FullWAVE</p>	<p>Part 2. Calculation of aberrations caused by static thermal and mechanical loads in OOFELIE::Multiphysics and Zemax</p>	<p>Invited lecture «Ophthalmic imaging using diffractive optics»</p> <p>Zeev Zalevsky (Israel)</p>
13:00 – 14:00	<i>Lunch</i>			
14:00 – 15:20	<p>Master-class «Zemax macrolanguage for optical system analysis»</p> <p>Dmitry Zavgorodny, Engineer, «LOMO»</p> <p>Stepan Ivanov, Senior optical engineer «Zebra Technologies Russia»</p> <p>Part 1. Features and structure of macrolanguage</p>	<p>Master-class «CodeV user day»</p> <p>Dmitriy Vorontsov, Application Engineer, «Light Tec», Germany</p> <p>Part 1. Introduction</p>	<p>Part 3. Simulation of heating due to light absorption in OOFELIE::Multiphysics and Zemax</p>	<p>Invited lecture «Optical information and communication technology»</p> <p>Kimio Tatsuno (Japan)</p>
15:20 – 15:40	<i>Coffee Break</i>			
15:40 – 17:00	<p>Part 2. Analysis of optical system manufacturability using macrolanguage</p>	<p>Part 2. Decentered and spatial elements</p>		

May 20, Wednesday

Location: ITMO University, Kronverksky av., 49, Assembly Hall

10:00 – 11:00	Marya Budargina PhD, Senior optometrist, «Linzacity», St.Petersburg, Russia Myopia. Distribution and forecast
	Genrikh Kadaner Senior researcher, Laboratory for Ophthalmology optics, Vavilov's State Optical Institute, St. Petersburg, Russia Boris Ovchinnikov PhD, Head of laboratory for Ophthalmology optics, Vavilov's State Optical Institute, St.Petersburg, Russia Mikhael Rubinshtein PhD, Senior researcher, «Tsnitochmash», Klimovsk, Russia Speckle-structure of laser irradiation – effective stimulator of visual analyzer
11:00 – 11:30	<i>Coffee Break</i>
11:30 – 13:00	Dina Cherkasova PhD, Assoc.Professor, Applied and computer optics department, ITMO University Alexey Bakholdin PhD, Head of Applied and computer optics department, ITMO University Computer modeling of human eye optical system
	Vitaly Bezzubik Researcher, LTBMO department, ITMO University Nikolay Belashenkov PhD, Head of International Laboratory «Intellectual optical systems», ITMO University Modeling of primary information processing in the human visual system
	Jury Shelepin D.Sc., Head of Vision physiology laboratory, Pavlov Institute of Physiology RAS, Head of laboratory for Virtual reality neurophysiology, ITMO University Neuroiconics
13:00 – 14:00	<i>Lunch</i>
14:00 – 16:00	Kristina Shefer PhD, Assoc.Professor, Department of Children ophthalmology, Mechnikov's North-West State Medical University, St. Petersburg, Russia Vision perception and arts
	Marina Danilova PhD., Senior researcher, Vision physiology laboratory, Pavlov Institute of Physiology RAS, St. Petersburg, Russia Color categories
	Elena Gorbunova PhD, Researcher, Optoelectronics devices and systems department, ITMO University Valery Korotayev D.Sc., Head of Optoelectronics devices and systems department, ITMO University Alexander Chertov PhD, Researcher, Optoelectronics devices and systems department, ITMO University Color in technical vision systems and applications
16:00 – 16:20	<i>Coffee Break</i>
16:20 – 17:30	Social program

May 21, Thursday

Location: ITMO University, Kronverksky av., 49, Assembly Hall

10:00 – 11:00	Rainer Foedisch General Manager, «Light Tec» GmbH, Germany LightTools software presentation. Part 1
11:00 – 11:30	<i>Coffee Break</i>
11:30 – 13:00	Rainer Foedisch General Manager, «Light Tec» GmbH, Germany LightTools software presentation. Part 2
13:00 – 14:00	<i>Lunch</i>
14:00 – 16:00	Presentation of young researchers' projects
16:00 – 16:20	<i>Coffee Break</i>
16:20 – 17:30	Round table