

Schedule of ADFLIM / SFM-18
3rd School on Advanced Fluorescence Imaging Methods
6th International Symposium “Optics and Biophotonics”
22nd International School for Junior Scientists and Students on Optics, Laser Physics & Biophotonics

September 24, Monday

September 24, Monday		
9.00-14.00	Registration	<i>Building 10, Foyer</i>
10.20-10.30	Introduction to ADFLIM/SFM Educational Program Alexander Savitsky, Research Center of Biotechnology of the RAS, Valery V. Tuchin, Saratov State University	<i>Building 10 Main Conference Hall</i>
10.30-11.50	ADFLIM/SFM PLENARY SESSION I Chairs: Valery V. Tuchin, Saratov State University Alexander P. Savitsky, Research Center of Biotechnology of the RAS Quantifying Stability in Deterministic and Stochastic Complex Systems, Jürgen Kurths, Humboldt University, Physics Department and Potsdam Institute for Climate Impact Research, Potsdam, Germany Optical Study of Molecular and Microrheologic Mechanisms of Interaction and Alteration of Blood Components in the Microcirculatory System Alexander V. Priezzhev, M.V. Lomonosov Moscow State University	<i>Building 10 Main Conference Hall</i>
11.50-12.20	Coffee break	<i>Building 10</i>
12.20-13.00	ADFLIM/SFM PLENARY SESSION II Chair: Alexander P. Savitsky, Research Center of Biotechnology of the RAS Biological Tissue Optics and Optical Clearing, Valery Tuchin, Saratov State University	<i>Building 10 Main Conference Hall</i>
13.00-14.00	Lunch	

14.00-15.00	SPIE SHORT COURSE Fluorescence Guided Procedures and Photodynamic Therapy in Neurosurgery Ronald Sroka , LIFE-Center at Department of Urology at Hospital of University of Munich, Munich, Germany	<i>Building 10 Hall 503</i>
15.00-15.30	Coffee break	<i>Building 10</i>
15.30-16.30	SPIE SHORT COURSE Fluorescence Guided Procedures and Photodynamic Therapy in Neurosurgery Ronald Sroka , LIFE-Center at Department of Urology at Hospital of University of Munich, Munich, Germany	<i>Building 10 Hall 503</i>
16.40-17.20	ADFLIM/SFM PLENARY SESSION III Chairs: Alexander P.Savitsky , Research Center of Biotechnology of the RAS Valery V. Tuchin , Saratov State University Plasmonic SERS Tags with Embedded Raman Molecules for Bioimaging and Sensing Applications, Nikolai G. Khlebtsov , Institute of Biochemistry and Physiology of Plants and Microorganisms of the RAS, Saratov State University	<i>Building 10 Main Conference Hall</i>
17.20-17.40	Coffee break	<i>Building 10</i>
17.40-19.00	ADFLIM/SFM PLENARY SESSION IV Chairs: Valery V. Tuchin , Saratov State University Alexander P.Savitsky , Research Center of Biotechnology of the RAS Optical Dosimetry of Extraoral Photobiomodulation Therapy of Oropharyngeal Mucositis in Pediatric Patients Undergoing Hematopoietic Cell Transplantation, Anna N. Yaroslavsky , Advanced Biophotonics Laboratory at the Department of Physics, University of Massachusetts, Lowell, USA Approaches of the molecular imaging and machine learning for medical applications Yury V. Kistenev et al. , Tomsk State University, Siberian State Medical University	<i>Building 10 Main Conference Hall</i>

September 25, Tuesday

9.00-14.00	Registration	<i>Building 10, Foyer</i>
10.00-11.00	OSA SHORT COURSE Diffuse Laser Speckles and their Statistics for Non-Invasive, Deep Tissue Blood Flow Measurements Turgut Durduran , ICREA Professor at ICFO -The Institute of Photonic Sciences, Barcelona, Spain	<i>Building 10, Hall 503</i>
11.00-11.30	Coffee break, Exhibition	<i>Building 10</i>
11.30-12.30	OSA SHORT COURSE Diffuse Laser Speckles and their Statistics for Non-Invasive, Deep Tissue Blood Flow Measurements Turgut Durduran , ICREA Professor at ICFO -The Institute of Photonic Sciences, Barcelona, Spain	<i>Building 10, Hall 503</i>
12.30-14.00	Lunch	
14.00-14.20	Opening of SFM and ADFLIM Valery V. Tuchin , Saratov State University, Alexander P. Savitsky , Research Center of Biotechnology of the RAS, and Wolfgang Becker , Becker&Hickl GmbH, Berlin, Germany	<i>Building 10 Main Conference Hall</i>
14.20-15.40	ADFLIM/SFM PLENARY SESSION V Chair: Wolfgang Becker , Becker&Hickl GmbH, Berlin, Germany How to Measure Tissue Blood Flow Non-Invasively with Light And What are The Current Trends? Turgut Durduran , ICFO-The Institute of Photonic Sciences, Barcelona, Spain Advanced Technologies for Brain Metin Akay , University of Houston, USA	<i>Building 10 Main Conference Hall</i>
15.40-16.10	Coffee break, Exhibition	<i>Building 10</i>

16.10-18.10	<p>ADFLIM/SFM PLENARY SESSION VI</p> <p>Chair: Turgut Durduran, ICFO-The Institute of Photonic Sciences, Barcelona, Spain</p> <p>Microscopy of the Brain on the Basis of Generation of Optical Harmonics: in Search of Optimum, Ilya V. Fedotov, M.V. Lomonosov Moscow State University</p> <p>Photonic and Magnetic Nanoparticles for Health, Energy, and Biosensing T. Randall Lee, University of Houston, USA</p> <p>Superconducting Thin Film Nanostructures as Terahertz and Infrared Heterodyne and Direct Detectors Grigory N. Goltsman, Moscow State Pedagogical University</p>	<i>Building 10 Main Conference Hall</i>
18.10-18.40	<p>SFM SPECIAL EVENT</p> <p>Chair: Valery V. Tuchin, Saratov State University</p> <p>Time-Resolved Single Photon Detection for Ultrafast Lifetime Imaging and Enhanced Superresolution STED Imaging Mathias Bayer, Sales and Application Specialist for Microscopy, Picoquant (Technoinfo), Germany</p>	
19.00-22.00	Welcome Party	<i>Univ.camp.</i>

September 26, Wednesday

9.00-10.00	SPIE SHORT COURSE Optical Dosimetry of Clinical Light Treatments Anna N. Yaroslavsky, Advanced Biophotonics Laboratory at the Department of Physics, University of Massachusetts, Lowell, USA						Building 10, Hall 503	
10.00-10.30	Coffee break, Exhibition						Building 10	
10.30-11.30	SPIE SHORT COURSE Optical Dosimetry of Clinical Light Treatments Anna N. Yaroslavsky, Advanced Biophotonics Laboratory at the Department of Physics, University of Massachusetts, Lowell, USA						Building 10, Hall 503	
11.40-13.00	SFM PLENARY SESSION VII Chair: Kirill Larin, University of Houston, USA Stone Fragmentation in Urology Ronald Sroka, LIFE-Center at Department of Urology at Hospital of University of Munich, Munich, Germany Imaging Below the Diffraction Limit by Spectroscopic Signal Separation Using Quantum Dots Andrei Sapelkin, Queen Mary University of London, UK	Building 10 Main Conference Hall	ADFLIM LECTURE SESSION I Chair: Francesco S. Pavone , European Lab. for Non-linear Spectroscopy, Florence, Italy	Building 10, Hall 503				
13.00-14.00	Lunch							
14.00-16.30	JOINT INVITED LECTURE/ORAL SESSION BIOPHYSICS I/MICROSCOPY AND LOW-COHERENCE METHODS Chair: Metin Akay , University of Houston, USA	Building 10 Main Conference Hall	ORAL SESSION PHOTONICS I Chair: Vladimir L. Derbov , Saratov State University	Building 3, Hall 34	LECTURE/ ORAL SESSION EDUCATION I Chairs: Boris A. Medvedev and Vladimir P. Ryabukho , Saratov State University	Scientific Library Conference Hall	ADFLIM LECTURE SESSION II Chair: Vladislav Shcheslavskiy , Becker&Hickl GmbH, Berlin, Germany	Building 10, Hall 503

	ORAL SESSION BIOCOMPUTING I Chair: Dmitry E. Postnov, Eugene B. Postnikov, Saratov State University, Kursk State University	<i>Building 8, Conference Hall</i>	ORAL SESSION BIOMEDICAL SPECTROSCOPY I Chair: Alexander B. Pravdin, Saratov State University	<i>Building 10, Hall 108</i>				
16.30-17.00	Coffee break, Exhibition							<i>Building 10</i>
17.00-19.15	INVITED LECTURE/ORAL SESSION BIOPHYSICS II Chair: Valery P. Zakharov, Samara University	<i>Building 10 Main Conference Hall</i>	ORAL SESSION LASER PHYSICS & PHOTONICS I Chair: Vladimir L. Derbov, Saratov State University	<i>Building 3, Hall 34</i>	ORAL SESSION BIOMEDICAL SPECTROSCOPY II Chair: Alexander Pravdin, State University	<i>Building 10, Hall 108</i>	ADFLIM LECTURE SESSION III Chair: Alexey Feofanov, Faculty of Biology, Moscow State University	<i>Building 10, Hall 503</i>
	ORAL SESSION BIOCOMPUTING II Chair: Dmitry E. Postnov, Saratov State University	<i>Building 8, Conference Hall</i>	ORAL SESSION EDUCATION II Chairs: B. Medvedev and V. Ryabukho, Saratov State University	<i>Scientific Library Conference Hall</i>	ORAL SESSION SPECTROSCOPY I Chair: Lev M. Babkov, Saratov State University	<i>Building 8, Hall 85</i>		
20.00-22.00	Social program (Volga boat tour)							

September 27, Thursday

9.00-11.00	<p>SFM PLENARY SESSION VIII Chair: Alexander V. Priezhev, M.V. Lomonosov Moscow State University</p> <p>Biphoton Emission and Absorption Processes Vladimir Gorelik, P.N. Lebedev Physical Institute of the RAS</p> <p>Optical Detection of Clinical Pathologies by Image and Spectroscopic Analysis Francesco S. Pavone, European Lab. for Non-linear Spectroscopy, Florence, Italy</p> <p>In Vivo Flow Cytometry for Detection of Silent Circulating Tumor Cells in Melanoma Ekaterina I. Galanzha, University of Arkansas Medical Science, USA; Saratov State University</p>	<i>Building 10, Main Conference Hall</i>	<p>ADFLIM SESSION IV Chair: Wolfgang Becker, Becker&Hickl GmbH, Berlin, Germany</p>	<i>Building 10, Hall 503</i>		
11.00-11.30	Coffee break, Exhibition				<i>Building 10</i>	
11.30-13.30	<p>INVITED LECTURE/ORAL SESSION BIOPHYSICS III Chair: Walter Blondel, University of Lorraine, CNRS, CRAN, France</p>	<i>Building 10, Main Conference Hall</i>	<p>ORAL SESSION LASER PHYSICS & PHOTONICS II Chair: Vladimir L. Derbov, Saratov State University</p>	<i>Building 8, Conference Hall</i>	<p>ADFLIM SESSION V Chair: Vladislav Shcheslavskiy, Becker&Hickl GmbH, Berlin, Germany</p>	<i>Building 10, Hall 503</i>
13.30-14.30	Lunch					
14.00-15.30	<p>PUBLIC LECTURE SESSION MODERN OPTICS Chairs: Georgy V. Simonenko, Alexander B. Pravdin, Saratov State University</p> <p>How Does the Brain Works? The Worldwide Initiatives Francesco S. Pavone, European Lab. for Non-linear Spectroscopy, Florence, Italy</p> <p>Biomechanical Analysis of the Embryonic Mouse Heart by Optogenetic Control Andrew L. Lopez III, Shang Wang, and Irina V. Larina, Department of Molecular Physiology and Biophysics, Baylor College of Medicine, Houston, Texas, USA</p> <p>Show "Exciting Light", Ivan V. Fedosov, Saratov State University</p>				<i>Building 3, Big Physical Hall</i>	

14.30-16.30	ORAL SESSION TERAHERTZ OPTICS AND BIOTECHNOLOGY Chair: Valeriy E. Karasik , Bauman Moscow State Technical University	<i>Building 10, Main Conference Hall</i>	ORAL SESSION NONLINEAR DYNAMICS Chair: Vadim S. Anishchenko , Saratov State University	<i>Building 3, Room 38</i>
	ORAL SESSION NANOBIPHOTONICS I Chair: Nikolai G. Khlebtsov , IBPPM RAS, Saratov State University	<i>Building 9, Conference Hall</i>	LOW-DIMENSIONAL STRUCTURES Chair: Olga Glukhova , Saratov State University	<i>Building 8, Room 82</i>
	ORAL SESSION LASER PHYSICS & PHOTONICS III Chair: Vladimir L. Derbov , Saratov State University	<i>Building 8, Conference Hall 3</i>	ROUND-TABLE DISCUSSION EDUCATION Chairs: Boris A. Medvedev and Vladimir P. Ryabukho , Saratov State University	<i>Scientific Library Conference Hall</i>
16.30-17.00	Coffee break, Exhibition			<i>Building 3</i>
17.00-18.30	SFM INTERNET PLENARY SESSION IX Chair: Valery V. Tuchin , Saratov State University Ubiquitous THz Photonics From Ultra-High Bit-Rate Communications To Super-Resolution Non-Destructive Imaging Maksim Skorobogatiy , Polytechnique Montreal, Canada Non-Invasive Optical Imaging of Tissue Microstructure and Microcirculations in Vivo Ruikang K. Wang , University of Washington, USA Biomedical Applications of Terahertz - Applications, Opportunities and Challenges Vincent P. Wallace , University of Western Australia, Australia			<i>Building 3, Big Physical Hall</i>
18.30-19.30	JOINT POSTER/INTERNET SESSION. COMPETITION FOR THE BEST STUDENT POSTER AWARD Chairs: Ivan V. Fedosov and Anton Dyachenko , Saratov State University			<i>Building 3, 1-3rd floor, BPH</i>

September 28, Friday

9.00-11.00	<p>SFM PLENARY SESSION X Chair: Kirill I. Zaytsev, Prokhorov Institute of General Physics of the RAS, Bauman Moscow State Technical University</p> <p>Recent advances in Embryonic Imaging and Tissue Elastography Kirill Larin, University of Houston, USA</p> <p>Photodiagnostics of Stress-Induced Gastrointestinal Neoplasia Ekaterina Borisova et al., Institute of Electronics, Bulgarian Academy of Sciences, Sofia, Bulgaria, Saratov State University</p> <p>Nanosatellite Biomedical Experiments in Space Valery P. Zakharov, Samara University, Russia</p>	Building 10 Main Conference Hall	<p>ADFLIM/ SESSION VI</p> <p>Vladislav Shcheslavskiy, Becker&Hickl GmbH, Berlin, Germany</p>	Building 10 Hall 503
11.00-11.30	Coffee break, Exhibition			Building 10
11.30-13.00	<p>ADVANCED MATERIALS FOR OPTICS AND BIOPHOTONICS I Chair: Vladimir N. Kurlov, Bauman Moscow State Technical University</p>	Building 10 Main Conference Hall	<p>ADFLIM SESSION VII ADFLIM CLOSING// WINNERS AWARD</p> <p>Chair: Alexander P. Savitsky, Research Center of Biotechnology of the RAS</p>	Building 10, Hall 503
	<p>ORAL SESSION NANOBIPHOTONICS II Chair: Nikolai G. Khlebtsov, IBPPM RAS, SSU</p>	Building 9, Conference Hall		
	<p>ORAL SESSION ELECTROMAGNETICS Chair: Michael V. Davidovich, Saratov State University</p>	Building 8, Room 82	<p>ORAL SESSION ENGLISH Chair: Alexander Pravdin, Saratov State University</p>	Scientific Library Conference Hall
	<p>ORAL SESSION POLARIZATION Chair: Dmitry A. Zimnyakov, Yuri Gagarin State Technical University of Saratov</p>	Building 1, Room 459, SSTU	<p>ORAL SESSION SPECTROSCOPY II Chair: Kirill V. Berezin, Saratov State University</p>	Building 3, Room 34
	<p>ORAL SESSION TELEMEDICINE Chairs: Valery V. Bakutkin, Saratov Research Institute of Rural Hygiene and Sergey R. Utz, Clinics of Skin and Venereal Diseases, SSMU, Russia</p>			Clinics of Skin and Venereal Diseases, SSMU
14.00-18.00	Round-table discussions and closing of the School. The Best Student Poster Award Ceremony.			Open Air Meeting