

**Schedule of SFM-17**  
**International Symposium “Optics and Biophotonics-V”**  
**21<sup>st</sup> International School for Junior Scientists and Students on Optics, Laser Physics & Biophotonics**

**September 25, Monday**

<b>September 25, Monday</b>				
12.00-14.00	<b>Registration</b>			<i>Building 10, Foyer</i>
14.00-14.10	<b>Opening of 21<sup>st</sup> International School on Optics, Laser Physics &amp; Biophotonics</b> Valery V. Tuchin, Saratov State University, Russia			<i>Building 10, Hall 503</i>
14.10-15.10	<b>SPIE SHORT COURSE</b> <b>Fluorescence Microscopy for Biomedical Applications</b> Herbert Schneckenburger, Aalen University, Germany			<i>Building 10 Hall 503</i>
15.10-15.40	<b>Coffee break</b>			
15.40-16.40	<b>SPIE SHORT COURSE</b> <b>Fluorescence Microscopy for Biomedical Applications</b> Herbert Schneckenburger, Aalen University, Germany			<i>Building 10 Hall 503</i>
16.40-19.00	<b>ORAL SESSION ENGLISH</b> Co-chairs: <b>Alexander B. Pravdin</b> and <b>Svetlana V. Eremina</b> , Saratov State University, Russia	<i>Building 10 Hall 503</i>	<b>LECTURE/ORAL SESSION EDUCATION I</b> Co-chairs: <b>Boris A. Medvedev</b> and <b>Vladimir P. Ryabukho</b> , Saratov State University, Russia	<i>Building 3, Room 34</i>

**September 26, Tuesday**

9.00-14.00	<b>Registration</b>							<i>Building 3, Foyer</i>
9.30-11.30	<b>OSA SHORT COURSE</b> <b>Speckle and Related Phenomena: Techniques and Applications in Biomedicine</b> Sean J. Kirkpatrick, Michigan Technological University, USA							<i>Building 10, Hall 503</i>
11.30-12.00	<b>Coffee break</b>							
12.00-13.00	<b>OSA SHORT COURSE</b> <b>Speckle and Related Phenomena: Techniques and Applications in Biomedicine</b> Sean J. Kirkpatrick, Michigan Technological University, USA							<i>Building 10, Hall 503</i>
13.00-14.00	<b>Lunch</b>							
14.00-14.10	<b>Opening of International Symposium “Optics and Biophotonics-V”</b> Valery V. Tuchin, Saratov State University, Russia							<i>Building 3, Big Physical Hall</i>
14.10-15.30	<b>PLENARY SESSION I</b> Chair: Valery V. Tuchin, Saratov State University, Russia <b>Polarization Optical Imaging as an Intraoperative Tool for Skin Cancer Delineation, Anna Yaroslavsky, University of Massachusetts, USA</b> <b>Advanced Methods of 3D Live Cell Microscopy, Herbert Schneckenburger, Aalen University, Germany</b>							<i>Building 3, Big Physical Hall</i>
15.30-16.00	<b>Coffee break</b>							
16.00-17.00	<b>ORAL SESSION PHOTONICS I</b> Chair: Vladimir L. Derbov, Saratov State University, Russia	<i>Building 10, Hall 503</i>	<b>INVITED/ORAL SESSION BIOPHYSICS I</b> Chair: Herbert Schneckenburger, Aalen University, Germany	<i>Building 10 Main Conference Hall</i>	<b>PLENARY SESSION BIOMEDICAL SPECTROSCOPY I</b> Chair: Alexander B. Pravdin, Saratov State University, Russia	<i>Building 3, Room 34</i>	<b>LECTURE/ORAL SESSION EDUCATION II</b> Co-chairs: B. Medvedev and V. Ryabukho, SSU, Russia	<i>Scientific Library Conference Hall</i>
17.00-18.00	<b>ORAL SESSION BIOCOMPUTING I</b> Chair: Dmitry E. Postnov, Saratov State University, Russia				<b>ORAL SESSION SPECTROSCOPY I</b> Chair: Lev M. Babkov, Saratov State University, RF			
18.00-18.30	<b>Student Concert</b>							<i>Building 10 Main Conference Hall</i>
19.00-21.00	<b>Welcome Party</b>							<i>University campus</i>

**September 27, Wednesday**

9.00-10.00	<p><b>SPIE SHORT COURSE</b>  <b>(Bauman Moscow State Technical Univ. SPIE Student Chapter)</b>  <b>Multimodal Imaging for the Biomedical Applications</b>  <b>Anna Yaroslavsky, University of Massachusetts, Lowell, USA</b></p>	<i>Building 10, Hall 503</i>
10.00-10.30	<b>Coffee break</b>	
10.30-11.30	<p><b>SPIE SHORT COURSE</b>  <b>(Bauman Moscow State Technical Univ. SPIE Student Chapter)</b>  <b>Multimodal Imaging for the Biomedical Applications</b>  <b>Anna Yaroslavsky, University of Massachusetts, Lowell, USA</b></p>	<i>Building 10, Hall 503</i>
11.30-12.00	<b>Coffee break</b>	
12.00-13.20	<p><b>PLENARY SESSION II</b>  Chair: <b>Alexander V. Priezzhev, Moscow State University, Russia</b>  <b>Laser Speckle Modeling and Simulation for Biophysical Dynamics, Kosar Khaksari, Tufts University, Sean J. Kirkpatrick, Michigan Technological University, USA</b>  <b>Advances in Label-Free Optical Endomicroscopy Technologies Towards Histological Imaging of Biological Tissues <i>in Vivo</i>, Xingde Li, Johns Hopkins University, USA</b></p>	<i>Building 10 Main Conference Hall</i>
13.20-14.20	<b>Lunch</b>	
15.30-17.30	<b>Social program (Volga boat tour)</b>	

**September 28, Thursday**

9.00-10.00	<b>OSA FELLOW SHORT COURSE</b> <b>Optical Coherence Tomography and Endoscopy</b> Xingde Li, Johns Hopkins University, USA						<i>Building 10, Hall 503</i>	
10.00-10.30	<b>Coffee break</b>							
10.30-11.30	<b>OSA FELLOW SHORT COURSE</b> <b>Optical Coherence Tomography and Endoscopy</b> Xingde Li, Johns Hopkins University, USA						<i>Building 10, Hall 503</i>	
11.30-12.00	<b>Coffee break</b>							
12.00-13.20	<b>PLENARY SESSION III</b> Chair: <b>Sean J. Kirkpatrick</b> , Michigan Technological University, USA  <b>Multiparametric Analysis of Tumor Development and Response for Chemotherapy Using Time-Resolved Imaging, Elena Zagaynova</b> <sup>1</sup> , Marina Shirmanova <sup>1</sup> , Marina Kuimova <sup>2</sup> , Konstantin Lukyanov <sup>3</sup> , Maria Lukina <sup>1</sup> , Lubov Shimolina <sup>1</sup> , Varvara Dudenkova <sup>1</sup> , Tatyana Sergeeva <sup>1</sup> , Natalia Klementieva <sup>1</sup> , Vladislav Scheslavsky <sup>4</sup> , Irina Druzhkova <sup>1</sup> , <sup>1</sup> Nizhny Novgorod State Medical Academy, Russia; <sup>2</sup> Imperial College, London, UK; <sup>3</sup> Institute of Bioorganic chemistry, Russia; <sup>4</sup> Becker & Hickl GmbH, Berlin, Germany  <b>Laser Trapping and Manipulation of Red Blood Cells: An Efficient Tool for Hemorheologic Research, Alexander V. Priezzhev</b> , Moscow State University, Russia						<i>Building 10, Main Conference Hall</i>	
13.20-14.20	<b>Lunch</b>							
14.20-15.00	<b>PUBLIC LECTURE SESSION</b> <b>MODERN OPTICS</b> Co-chairs: <b>Georgy V. Simonenko, Alexander B. Pravdin</b> , Saratov State University, Russia  <b>Recent Developments of Translational Optical Micro Imaging Technologies, Xingde Li</b> , Johns Hopkins University, USA  <b>Shining Light on Cells and Tissue, Herbert Schneckenburger</b> , Aalen University, Germany						<i>Building 3, Big Physical Hall</i>	
14.20-16.00	<b>JOINT ORAL SESSION</b> <b>POLARIZATION I/</b> <b>MICROSCOPY AND LOW-COHERENCE METHODS</b> Co-Chairs: <b>Dmitry A. Zimnyakov</b> , Saratov State Technical University, Russia, <b>Kirill Larin</b> , Houston University, USA	<i>Building 10 Main Conference Hall</i>	<b>ORAL SESSION</b> <b>PHOTONICS II</b> Chair: <b>Vladimir L. Derbov</b> , Saratov State University, Russia	<i>Building 10, Hall 503</i>	<b>ORAL SESSION</b> <b>NONLINEAR DYNAMICS I</b> Chair: <b>Vadim S. Anishchenko</b> , SSU Russia	<i>Building 3, Room 38</i>	<b>ROUND-TABLE DISCUSSION</b> <b>EDUCATION II</b> Co-chairs: <b>Boris A. Medvedev</b> and <b>Vladimir P. Ryabukho</b> , Saratov State University, Russia	<i>Scientific Library Conference Hall</i>
			<b>LOW-DIMENSIONAL STRUCTURES</b> Chair: <b>Olga Glukhova</b> , SSU, Russia	<i>Building 3, Room 34</i>	<b>ORAL SESSION</b> <b>NANOBIOPHOTONICS I</b> Chair: <b>Nikolai G. Khlebtsov</b> , IBPPM RAS, SSU, Russia	<i>Building 9, Conference Hall</i>		

16.00-16.30	<b>Coffee break</b>	
16.30-18.30	<p><b>PLENARY SESSION IV INTERNET BIOPHOTONICS</b></p> <p>Chair: <b>Valery V. Tuchin</b>, Saratov State University, Russia</p> <p><b>Speckle Fluctuations to Probe Dynamics on the Macroscopic to Microscopic Scales, David Boas</b>, Boston University, USA</p> <p><b>Acousto-Optics - Review of Recent Developments in Biomedicine, Stefan Andersson-Engels</b>, Michael Raju and Jacqueline Gunter, Tyndall National Institute and Department of Physics, University College Cork, Cork, Ireland</p> <p><b>Optical Tools in Radiation Therapy, Brian Pogue</b>, Dartmouth College, USA</p> <p><b>In vivo skin optical clearing window for cutaneousvascular and cell imaging Dan Zhu</b>, Britton Chance Center for Biomedical Photonics, Huazhong University of Science and Technology, Wuhan, China</p>	<i>Building 3, Big Physical Hall</i>
16.30-19.30	<p><b>JOINT POSTER/INTERNET SESSION AND INTERNET DISCUSSION. COMPETITION FOR THE BEST STUDENT POSTER AWARD</b></p> <p>Moderators: <b>Dmitry Agafonov, Ivan V. Fedosov</b>, Saratov State University, Russia</p> <p><b>Special event: Fair of Innovative Biophotonics Technologies</b> <a href="https://nano-glass.ru/fair/index.html">https://nano-glass.ru/fair/index.html</a></p>	<i>Building 3, 3<sup>rd</sup> floor Hall  Room 34</i>

**September 29, Friday**

9.00-10.20	<p><b>PLENARY SESSION V</b>                  Chair: <b>Herbert Schneckenburger</b>, Aalen University, Germany</p> <p><b>New Generation of Compact Laser Sources for Imaging, Diagnostics and Treatment In Biomedicine, Edik Rafailov</b>, Aston University, UK</p> <p><b>Sapphire Shaped Crystals for Biomedical Applications, Vladimir N. Kurlov</b><sup>1</sup>, Irina A. Shikunova<sup>1</sup>, Gleb M. Katyba<sup>1</sup>, Sergey N. Rossolenko<sup>1</sup>, Nikita V. Chernomyrdin<sup>2</sup>, Andrei A. Kuznetsov<sup>2</sup>, Igor V. Reshetov<sup>3</sup>, Kirill I. Zaytsev<sup>2,4</sup>, <sup>1</sup>Institute of Solid State Physics of RAS; <sup>2</sup>Bauman Moscow State Technical University; <sup>3</sup>Sechenov First Moscow State Medical University; <sup>4</sup>Prokhorov General Physics Institute of RAS, Russia</p>							Building 10 Main Conference Hall
10.20-10.30	<p><b>Special Event: OSA Presentation, Xingde Li</b>, Johns Hopkins University, USA</p>							
<p><b>10.30-11.00 Coffee break</b></p>								
11.00-13.00	<p><b>JOINT INVITED/ORAL SESSION BIOPHYSICS III/ PHYSIOLOGY I</b>                  Chair: <b>Edik Rafailov</b>, Aston University, UK</p>	<p><i>Building 10                  Main                  Conference                  Hall</i></p>	<p><b>ORAL SESSION BIOCOMPUTING II</b>                  Chair: <b>Eugeny B. Postnikov</b>, Kursk State University, Russia</p>	<p><i>Building 10,                  Hall 503</i></p>	<p><b>ORAL SESSION SPECTROSCOPY II</b>                  Chair: <b>Kirill V. Berezin</b>, Saratov State University, Russia</p>	<p><i>Building 3,                  Room 34</i></p>	<p><b>ORAL SESSION BIOMEDICAL SPECTROSCOPY II</b>                  Chair: <b>Vyacheslav I. Kochubey</b> Saratov State University, Russia</p>	<p><i>Scientific                  Library                  Conference                  Hall</i></p>
	<p><b>ORAL SESSION POLARIZATION II</b>                  Chair: <b>Dmitry A. Zimnyakov</b>, Saratov State Technical University, Russia</p>	<p><i>Building 1,                  Room 459,                  SSTU,                  77                  Politechnic                  heskaya                  Str.</i></p>	<p><b>ORAL SESSION ELECTROMAGNETICS</b>                  Chair: <b>Michael V. Davidovich</b>, Saratov State University, Russia</p>	<p><i>Building 8,                  Room 82</i></p>	<p><b>ORAL SESSION NONLINEAR DYNAMICS II</b>                  Chair: <b>Vadim S. Anishchenko</b>, Saratov State University, Russia</p>	<p><i>Building 3,                  Room 38</i></p>	<p><b>ORAL SESSION NANOBIPHOTONICS II</b>                  Chair: <b>Nikolai G. Khlebtsov</b>, IBPPM RAS, SSU, Russia</p>	<p><i>Building 9,                  Conference                  Hall</i></p>
	<p><b>ORAL SESSION TELEMEDICINE</b>                  Co-chairs: <b>V. Bakutkin</b>, Saratov Research Institute of Rural Hygiene and <b>Sergey Utz</b>, Clinics of Skin and Venereal Diseases, SSMU, Russia</p>							<p><i>Clinics of Skin                  and Venereal                  Diseases,                  SSMU, 22                  Proviant'skaya                  Str.</i></p>
14.00-17.00	<p><b>Round-table discussions and closing of the School. The Best Student Poster Award Ceremony.</b></p>							<p><i>Open Air                  Museum</i></p>

**September 30, Saturday**

10.00-12.00

**ORAL SESSION and ROUND-TABLE DISCUSSION  
PHYSIOLOGY II**

Chair: **Oxana Semyachkina-Glushkovskaya**, Saratov State University, Russia

*Building 10,  
Hall 503*