

<b>Saturday, October 2</b>	
11.00-20.00	Registration, Check-in at Hotel “Palas”
<b>Monday, October 4</b>	
10.00-11.00	Opening ceremony
11.00-11.30	Coffee break
11.30-12.10	<b>Plenary Presentation</b> S.V. Garnov, V.V. Bukin Laser methods of generation of megavoltage terahertz fields <i>A.M.Prokhorov General Physics Institute of RAS, Moscow, Russia</i>
12.10-12.50	<b>Plenary Presentation</b> V. Veiko, E.Shakhno, M. Yarchuk, A. Ivanov Laser writing on thin Cr films under short pulse laser action at the resolution limit <i>St-Petersburg State University of Information Technologies, Mechanics and Optics, St-Petersburg, Russia</i>
12.50-13.30	<b>Plenary Presentation</b> S. Mikhailov Laser induced plasma arc technology in industrial application
13.30-14.10	<b>Plenary Presentation</b> Boris N. Chichkov Laser-based nanotechnologies for applications in photonics and bio medicine <i>Laser Zentrum Hannover e.V., Nanotechnology Department, Germany</i>
14.10-15.00	Lunch time
15.00-15.40	<b>Plenary Presentation</b> Milosevic Hranislav, Petkovic Dojcin Modeling of Interaction of the Low-Temperature Plasma Jet with Two-Phase Co-Flow in a Tube <i>Faculty of Science and Mathematics University in Pristina, Kosovska Mitrovica, Serbia</i>
15.40-16.20	<b>Plenary Presentation</b> A.A. Samokhin, N.N. Il'ichev Doppler acoustic monitoring of absorbing-liquid-surface-displacement during laser irradiation <i>A.M.Prokhorov General Physic Institute of RAS, Moscow, Russia</i>
16.20-17.00	Coffee break
17.00-17.40	<b>Plenary Presentation</b> V.I. Pustovoy Luminescent Silicon Quantum Dots <i>A.M.Prokhorov General Physic Institute of RAS, Moscow, Russia</i>
17.40-18.20	<b>Plenary Presentation</b>

	S.S. Alimpiev Laser mass spectrometry of liquids <i>A.M.Prokhorov General Physic Institute of RAS, Moscow, Russia</i>
20.00-22.00	Discussion
<b>Tuesday, October 5</b>	
10.00-10.40	<b>Plenary Presentation</b> Yu.A. Teterin <sup>1</sup> , M.V. Ryzhkov <sup>2</sup> , A.Yu. Teterin <sup>1</sup> , L. Vukcevic <sup>3</sup> , K.I. Maslakov <sup>1</sup> , K.E. Ivanov <sup>1</sup> Mathematical Modeling of Electronic Structure of Thorium Dioxide ThO <sub>2</sub> in MO LCAO Approximation <sup>1</sup> RRC "Kurchatov Institute", Moscow, Russia <sup>2</sup> Institute of Solid State Chemistry of the Ural Branch of RAS, Ekaterinburg, Russia <sup>3</sup> University of Montenegro, Podgorica, Montenegro
10.40-11.20	<b>Plenary Presentation</b> Dmitry S. Ivanov Molecular Dynamics based study of solid targets response to a strong localized excitation <i>Fraunhofer Institute for Laser Technology, Department of Modeling and Simulation, Aachen, Germany</i>
11.20-12.00	<b>Plenary Presentation</b> Vladimir I. Mazhukin Dynamics of fast phase transitions in metals during pulsed laser action <i>Keldysh Institute of Applied Mathematics RAS, Russia, Moscow</i>
12.00-12.30	Coffee break
12.30-13.10	<b>Plenary Presentation</b> M.E. Povarnitsyn Simulation of femtosecond laser ablation of metals <i>Joint Institute for High Temperatures of RAS, Moscow, Russia</i>
13.10-13.50	<b>Plenary Presentation</b> O.S. Mazhorova, O.V. Shcheryca Analysis methods for numerical solution of heat - the diffusion of the Stefan problem <i>Keldysh Institute of Applied Mathematics RAS, Moscow, Russia</i>
14.00-15.00	Lunch time
15.00-15.40	<b>Plenary Presentation</b> A. Savel'ev Fast electron bunches from femtosecond laser-plasma interaction <i>Lomonosov Moscow State University, Moscow, Russia</i>
15.40-16.20	<b>Plenary Presentation</b> Pavicevic Zarko Normality and curvilinear limits of meromorphic functions and applications <i>University of Montenegro, Podgorica, Montenegro</i>

16.20-17.00	<p style="text-align: center;"><b>Plenary Presentation</b>  Z. A. Chekanceva  The politics of memory and history simulation  <i>Institute of General History RAS, Moscow, Russia</i></p>
17.00-17.30	Coffee break
17.30-19.00	General debate on define theme: the interaction of scientific schools
20.00-22.00	Discussion
<b>Wednesday, October 6</b>	
10.00-17.00	Social program
<b>Thursday, October 7</b>	
10.00-10.40	<p style="text-align: center;"><b>Plenary Presentation</b>  A.Yu. Ivochkin<sup>1</sup>, A.G. Kaptilny<sup>2</sup>, A.A. Karabutov<sup>1</sup>, D.M. Ksenofontov<sup>1</sup>  Laser-induced phase transitions in an impedance interface between the metal:  aluminum, mercury, lead  <sup>1</sup><i>Lomonosov Moscow State University, Moscow, Russia</i>  <sup>2</sup><i>Joint Institute for High Temperatures of RAS, Russia, Moscow</i></p>
10.40-11.20	<p style="text-align: center;"><b>Plenary Presentation</b>  S.M. Klimentov<sup>1</sup>, P.A. Pivovarov<sup>1</sup>, N. Fedorov<sup>2</sup>, S. Guizard<sup>2</sup>, V.I. Konov<sup>1</sup>  Conical emission in focused beams: time, wavelength and spot-size dependences  <sup>1</sup><i>A.M.Prokhorov General Physic Institute of RAS, Moscow, Russia</i>  <sup>2</sup><i>Ecole Polytechnique, Palaiseau, France</i></p>
11.20-12.00	<p style="text-align: center;"><b>Plenary Presentation</b>  A.P.Shkurinov  Role of multiphoton ionization by two-color laser pulse in the THz wave  generation  <i>M.V.Lomonosov Moscow State University, Moscow, Russia</i></p>
12.00-12.30	Coffee break
12.30-13.10	<p style="text-align: center;"><b>Plenary Presentation</b>  A.G. Kaptilny<sup>1</sup>, A.A. Karabutov<sup>2</sup>  Optothermodynamics near-and supercritical states of metals. Formulation of the  problem. Methods of experimental study  <sup>1</sup><i>Joint Institute for High Temperatures of RAS, Moscow, Russia</i>  <sup>2</sup><i>Lomonosov Moscow State University, Moscow, Russia</i></p>
13.10-13.50	<p style="text-align: center;"><b>Plenary Presentation</b>  M.P. Galanin  Some methods for solving operator equations  <i>Keldysh Institute of Applied Mathematics RAS, Moscow, Russia</i></p>
14.00-15.00	Lunch time
<b>Section: Mathematical Models and Modeling in laser-Plasma Processes</b>	

15.00-15.15	A.V. Shapranov, M.M. Demin Molecular dynamics modeling of picosecond ablation of metal foil <i>Keldysh Institute of Applied Mathematics RAS, Moscow, Russia</i>
15.20-15.35	G.G. Elenin New numerical methods for molecular dynamics simulations <i>Lomonosov Moscow State University, Moscow, Russia</i>
15.40-15.55	S.A. Kozlov Theoretical methods of femtosecond optics <i>St.Petersburg State University of IT, Mechanics and Optics, St.Petersburg, Russia</i>
16.00-16.15	Rakovic Predrag Mathematical models and modeling in laser-plasma processes <i>Electrotechnical faculty, University of Montenegro, Podgorica, Montenegro</i>
16.20-16.35	Michalevic Nicola, Јовановић Слободан, Длабач Александар Efficiency of semiconductor detectors for the case when the source of the cuboid shape - brick geometry <i>University of Montenegro, Podgorica, Montenegro</i>
<b>Section: Mathematical Modeling in Science Technologies</b>	
15.00-16.15	Radovan Stojanovic <sup>1</sup> , Marija Mirkovic <sup>1</sup> and O. Chizhova <sup>2</sup> VHDL based Detection of R-Wave in ECG Signal Using Wavelet Method <sup>1</sup> <i>University of Montenegro, Podgorica, Montenegro</i> <sup>2</sup> <i>Moscow University for the Humanities, Moscow, Russia</i>
15.20-15.35	T.V. Koroleva Assessment of profitability of the investment project in a wide range of risk and inflation <i>Moscow University for the Humanities, Moscow, Russia</i>
15.40-15.55	Andrej Skraba <sup>1</sup> , Radovan Stojanovic <sup>2</sup> , Nedeljko Lekic <sup>2</sup> , Marjan Senegacnik <sup>1</sup> A Simulation Tool for Modeling Pollutant Dispersion for Educational Purposes <sup>1</sup> <i>University of Maribor, Faculty of Organizational Sciences, Slovenia</i> <sup>2</sup> <i>University of Montenegro, Faculty of Electrical Engineering, Montenegro</i>
16.00-16.15	O.G. Tsarkova Business game as a method of team development - psycho-physical training <i>.M.Prokhorov General Physic Institute of RAS, Moscow, Russia</i>
17.00-17.30	Coffee break
17.30-19.00	General debate on theme: Education in the XXI century
20.00-22.00	Discussion
<b>Friday, October 8</b>	
10.00-10.40	<b>Plenary Presentation</b> S.K. Vartapetov Laser and laser system for technology and medicine <i>A.M.Prokhorov General Physic Institute of RAS, Moscow, Russia</i>
10.40-11.20	<b>Plenary Presentation</b>

	V. Popov Laser-Informational Technologies for Biomedicine <i>Institute of Laser and Information Technologies RAS, Moscow, Russia</i>
11.20-12.00	<b>Plenary Presentation</b> A.A. Rukhadze <i>A.M.Prokhorov General Physics Institute of RAS, Moscow, Russia</i>
12.00-12.30	Coffee break
12.30-13.10	<b>Plenary Presentation</b> I.G. Lebo Mathematical Models&Modeling in: Laser-Plasma Processes; Science Technologies <i>Moscow state institute of radio engineering, electronics and automation, Moscow, Russia</i>
<b><i>Section: Mathematical Models and Modeling in laser-Plasma Processes</i></b>	
13.10-13.25	V. Dorodnitsyn Symmetry approach to finite-difference modeling <i>Keldysh Institute of Applied Mathematics RAS, Moscow, Russia</i>
13.30-13.45	Stamatovic Biljana <i>University of Montenegro, Montenegro</i>
13.50-14.05	M.V. Mikhaylyuk <i>Institute for System Researches RAS, Moscow, Russia</i>
14.00-15.00	Lunch time
15.00-17.00	Discussion. Closing of Seminar.
17.00-....	Banquet
<b>Saturday, October 9</b>	
10.00-23.00	Departure

### **Poster Presentations**

#### **Monday, October 4 - Friday, October 8**

A.A. Samokhin  
Parameterization and evaluation of scientific activity  
*A.M.Prokhorov General Physics Institute of RAS, Moscow, Russia*

O. Garanina  
A new technique for modeling the distribution of income to splurge on new cars  
*A.M.Prokhorov General Physics Institute of RAS, Moscow, Russia*

V.A.Gasilov<sup>1</sup>, A.S.Boldarev<sup>1</sup>, S.V.D'yachenko<sup>1</sup>, E.L.Kartasheva<sup>1</sup>, O.G.Olkhovskaya<sup>1</sup>,  
S.N.Boldyrev<sup>1</sup>, G.A.Bagdasarov<sup>1</sup>, I.V.Gasilova<sup>1</sup>, V.A.Shmyrov<sup>2</sup>, J. Grunenwald<sup>3</sup>, Th. Maillard<sup>3</sup>  
Numerical technologies in 3d z-pinch simulations  
<sup>1</sup>*Keldysh Institute of Applied Mathematics RAS, Moscow, Russia*  
<sup>2</sup>*MTU "STANKIN", Moscow, Russia*  
<sup>3</sup>*CEG, Gramat, France*

V. Lipp, Dmitry S. Ivanov, Wolfgang Schulz  
Atomistic-continuum modeling of short pulse laser melting of semiconductors  
*Fraunhofer Institute for Laser Technology, Department of Modeling and Simulation, Aachen, Germany*

Jela Susic  
The geometry of discrete groups and boundary properties  
*University of Montenegro*

Nikolic Emilija, Nikolic Aleksandar  
Communal noise influence on company Promonte GSM employees health  
*Faculty for physiotherapy – Igalo, DOO MONTINSPEKT - Podgorica, Montenegro*

D. D. Radosavljevic<sup>1</sup>, S. J. Trajkovic<sup>2</sup>  
Object oriented programming in c ++ (case study)  
<sup>1</sup>*High Business Technical School, Uzice, Serbia*  
<sup>2</sup>*Faculty of Economics, K. Mitrovica, Serbia*

Vukcevic Labud  
Mathematical modeling of electronic structure of thorium tetrafluoride ThF<sub>4</sub> in the relativistic approximation  
*University of Montenegro*

A.V. Mazhukin  
Building a computational grid using the method of dynamic adaptation  
*Keldysh Institute of Applied Mathematics RAS, Moscow, Russia*

O.N. Koroleva<sup>1</sup>, A.V. Mazhukin<sup>2</sup>  
Modeling of propagation of optoacoustic signals generated by laser radiation in metals and semiconductors  
<sup>1</sup>*Moscow University for the Humanities, Moscow, Russia*  
<sup>2</sup>*Keldysh Institute of Applied Mathematics RAS, Moscow, Russia*

T.V. Koroleva<sup>1</sup>, O.N. Koroleva<sup>1</sup>, A.V. Mazhukin<sup>2</sup>  
Investigation of the effectiveness of two investment projects  
<sup>1</sup>*Moscow University for the Humanities, Moscow, Russia*  
<sup>2</sup>*Keldysh Institute of Applied Mathematics RAS, Moscow, Russia*

V.I.Mazhukin, P.V.Breslavsky  
Mathematical modeling of two-dimensional hydrodynamic Stefan problems  
*Keldysh Institute for Applied Mathematics RAS, Moscow, Russia*

Vukcevic Zdravko  
Entropy of poetic language, P.P. Njegos  
*University of Montenegro, Podgorica, Montenegro*

Vukoslavcevic Vanja  
Some Necessary and Sufficient Conditions for Stability of Three-Layer Difference Schemes with Weights  
*University of Montenegro, Podgorica, Montenegro*