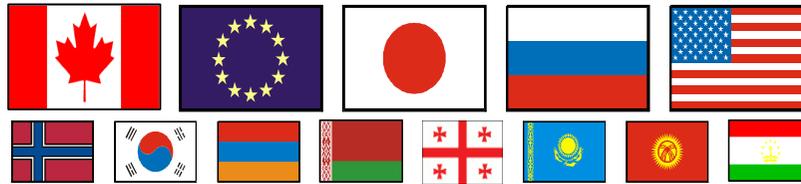


I S T C



М Н Т Ц



ISTC “Russian ELI/HiPER/PETAL WORKSHOP”

*Moscow, Russia,
Krasnoproletarskaya ul. 32-34
24-25 November, 2008*

MONDAY, November 24, 2008

8:30 – 9:00 Registration

Auditorium 211

9:00 – 9:30 Opening Session

9:00 –9:15 Welcome address and role of ISTC

Mr. Adriaan van der Meer, Executive Director

9:15 – 9:30 Welcome from CEA

Dr. Daniel Malys, Charge de Mission Russie, CEA/DAM

9:30 – 13:00 Plenary session I: Status of High field science with lasers

Chairs: Prof. Mike Dunne and Prof. Vladimir Tikhonchuk

9:30 – 10:00 Extreme Light Physics

Prof. Gerard Mourou, ELI Coordinator

10:00 – 10:20 Extreme Power Photonics: New Phenomena

Prof. Nikolay Narozhny, MEPHI

10:20 – 10:40 Prospect of Relativistic Laser Plasmas for Studying Fundamental Processes

and Relativistic Astrophysics

Prof. Sergey Bulanov, APRC Japan AEA

10:40 – 11:00 Heading toward reliable laser-based sources of monoenergetic particles. Path to cooperation

Prof. Valery Bychenkov, Lebedev Institute RAS

ISTC “Russian ELI/HiPER/PETAL WORKSHOP” AGENDA

Moscow, Krasnoproletarskaya ul. 32-34

MONDAY, November 24, 2008

Auditorium 211

- | | |
|----------------------|---|
| 11:20 – 11:40 | Strongly coupled plasma in laboratory and space
Prof. Vladimir Fortov, Joint Institute for High Temperatures RAS |
| 11:40 – 12:00 | Hybrid OPCPA-CPA Prototype for ELI
Prof. Efim Khazanov, Institute of Applied Physics RAS |
| 12:00 – 12:20 | Novel Fiber-Optic Components for Ultrafast High-Power Photonics
Prof. Alexey Zheltikov, Moscow State University |
| 12:20 – 12:40 | The Aspects on high contrast irradiation of targets at RFNC-VNIITF
laser
facility "Sokol-P"
Prof. Eugeny Avrorin, Alexander Andriyash, A.F.Ivanov, Eugeny
Loboda, Vladimir Lykov, Anatoly Potapov, RFNC-VNIITF |
| 12:40 – 13:00 | Laser Technologies, Experiments and Diagnostics
Prof. Ivan Sherbakov, Prokhorov General Physics Institute RAS |
| 13:00 – 14:30 | Lunch |

ISTC “Russian ELI/HiPER/PETAL WORKSHOP” AGENDA

Moscow, Krasnoproletarskaya ul. 32-34

MONDAY, November 24, 2008

Auditorium 211

- 14:30 – 18:00** **Plenary session II: Possible official frames for future EU-Russian cooperation**
Chairs: Prof. Christine Labaune and Prof. V. Bychenkov
- 14:30 – 14:50** **RFBR View and Proposals for a Future Technical Cooperation**
Prof. Alexey Zheltikov, Russian Foundation for Basic Research
- 14:50 – 15:20** **ELI-Scientific and Organizational Structure**
Prof. Georg Korn, Max-Planck-Institute of Quantum Optics
- 15:20 – 15:40** **Status and perspectives of collaboration of CNRS with Russian research community in advanced laser technology/research**
Prof. Vladimir. Mayer, CNRS Directeur de recherche Responsable
- 15:40 – 16:00** **Collaboration projects under the French-Russian interacademical agreements and the European Seventh Framework Program**
Prof. Vladimir Tikhonchuk, CELIA, University; Bordeaux 1
- 16:00 – 16:30** **Coffee break**
- 16:30 – 18:00** **Possible official frames for future EU-Russian cooperation.**
Discussion of a roadmap for agreement on a future cooperation
All Participants
Moderators: Prof. G. Mourou, Prof. M. Dunne, Prof. T. Kuehl, Prof. A. Zheltikov, Prof. W. Gudowski

ISTC “Russian ELI/HiPER/PETAL WORKSHOP” AGENDA

Moscow, Krasnoproletarskaya ul. 32-34

TUESDAY, November 25, 2008

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|----------------------|---|------------------------------|
| 8:30 – 9:00 | Registration | <u>Auditorium 211</u> |
| 9:00 – 11:10 | <u>Plenary session III: Inertial fusion energy</u>
Chairs: Prof. G. Schurtz and Prof. T. Kuehl | |
| 9:00 – 9:30 | HiPER - the European Path to Laser Fusion
Prof. Mike Dunne, Science & Technology Facilities Council, UK | |
| 9:30 – 10:00 | PETAL
Prof. Christine Labaune, CNRS-Institut Lasers et Plasmas, France | |
| 10:00 – 10:30 | Laser Mega Joule Project
Prof. Jacques Ebrardt, CEA Centre DAM, Arpajon, France | |
| 10:30 – 10:50 | Laser target technology at the Lebedev Physics Institute -
Participation in EU projects
Dr. Natalia Borisenko, Prof. Elena Koresheva, Lebedev Institute RAS | |
| 10:50 – 11:10 | Large aperture elements from KDP and DKDP crystals for high
power
femtosecond laser's systems
Prof. Alexey Babin, Institute of Applied Physics RAS | |
| 11:10 – 11:30 | Coffee break | |

ISTC “Russian ELI/HiPER/PETAL WORKSHOP” AGENDA

- Moscow, Krasnoproletarskaya ul. 32-34
- 11:30 – 13:00** **Plenary session IV: Laser-plasma interactions and fast ignition**
Chairs: Prof. G. Mourou and Prof. N. Narozhny
- 11:30 – 11:50** **Photo-chemically driven active media for ultra high intensity femtosecond system: towards Exawatt powers**
Dr. Leonid Mikheev, Lebedev Institute RAS
- 11:50 – 12:10** **Bright sources of radiation and high-energy electrons using short intense laser pulses. Joint strategy for EU projects**
Prof. Nikolai Andreev, Prof. Mikhail Agranat, Joint Institute for High Temperatures RAS
- 12:10 – 12:30** **Generation of super strong light fields by advanced laser optics and their applications**
A.A.Andreev¹, A.V.Charukchev², A.A.Mak¹, N.N.Rosanol¹, Yu.M.Stolyarov¹, V.E.Yashin¹, 1. RIC "Vavilov State Optical Institute", St. Petersburg, Russia, 2. NIIKI OEP, Sosnovy Bor Leningrad region, Russia
- 12:30 – 12:45** **The development of ICF-target design for spark ignition and fast ignition approaches. LPI activity and international collaboration**
Prof. Sergey Gus'kov, Lebedev Institute RAS
- 12:45 –13:00** **Optical, X-ray, and corpuscular diagnostics**
Prof. Andrei Shikanov and Alexander Rupasov, Lebedev Institute RAS
- 13:00 – 14:30** **Lunch**

ISTC “Russian ELI/HiPER/PETAL WORKSHOP” AGENDA

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TUESDAY, November 25, 2008

Auditorium 211

- 14:30 – 16:00** **Plenary session V: Matter under extreme conditions**
Chairs: Prof. N. Andreev and Prof. S. Bulanov
- 14:30 – 14:50** **High Power Laser Facilities RFNC-VNIEF**
Prof. Sergey Garanin, Prof. Gennady Kochemasov, RFNC-VNIEF
- 14:50 – 15:10** **Target design for IFE and the shock ignition**
Prof. Guy Schurtz, CELIA, University; Bordeaux 1
- 15:10 – 15:30** **PHELIX-laser at GSI Darmstadt: Status and Research Program**
Prof. Thomas Kuehl, PHELIX, GSI -Helmholtzzentrum fuer
Schwerionenforschung GmbH
- 15:30 – 15:45** **Experimental and theoretical study of high-energy-density states in**
matter
induced by intense laser beams. Ongoing and near future cooperation
Prof. Igor Lomonosov, Institute of Problems of Chemical Physics
RAS
- 15:45 – 16:00** **Wide-range equations of state and phase transitions of substances at**
high
energy densities
Prof. Konstantin Khishchenko, Joint Institute for High Temperatures
RAS
- 16:00 – 16:30** **Coffee break**

ISTC “Russian ELI/HiPER/PETAL WORKSHOP” AGENDA

Moscow, Krasnoproletarskaya ul. 32-34

TUESDAY, November 25, 2008

Auditorium 211

- 16:30 – 17:30** **Final discussion of a roadmap for agreement on Russian-EU cooperation**
Moderators: Prof. G. Mourou, Prof. M. Dunne, Prof. T. Kuehl, Prof. A. Zheltikov, Prof. W. Gudowski
- 17:30 – 18:00** **Summary Documents**
Chairs: Prof. V. Tikhonchuk, Prof. V. Mayer, Prof. W. Gudowski, Dr. D. Malys, Prof. A. Zheltikov
- 18:00 – 21:00** **Banquet**
Hosted by ISTC in the ISTC Cafeteria