



International Conference on Ultrafast Optical Science

October 01-05, 2018

Lebedev Physical Institute (LPI), Leninskiy prospect 53, Moscow, Russia

Website: ultrafastlight.lebedev.ru

Chair – Nikolay N. Kolachevsky (LPI), vice-chair – Andrey A. Ionin (LPI)

Conference scope

- Ultra-intense electromagnetic fields and strong-field phenomena
- Ultrafast processes in solids and gases
- Ultrafast nanophotonics, structured light and nanofabrication
- Non-linear optics and filamentation of ultrashort pulses
- Ultrafast dynamics in photobiology and photochemistry
- Ultrashort-pulse lasers and innovative technologies
- Femtosecond radiation in spectroscopy and optical frequency metrology

Conference sections

1. Radiation and nuclear photonics at high fields

Section Chair: Andrei Savel'ev (MSU), email: abst@physics.msu.ru

Program committee

Valeri Bychenkov (LPI, Russia)

Klaus Spohr (ELI-NP, Romania)

Tsuneyuki Ozaki (INRS, Canada)

Bjorn M. Hegelich (The University of Texas at Austin, USA)

Scope

- Laser plasma sources of ionizing radiation
- Nuclear physics with lasers
- Extreme fields physics
- Ultra high intensity facilities

2. Ultrafast phenomena in condensed matter and ionized gases

Section Chair: Sergey Uryupin (LPI), email: uryupin@lebedev.ru

Program committee

Nadezhda Bulgakova (HiLASE Centre, Institute of Physics ASCR, Czech Republic)

Sergey Popruzhenko (Max Planck Institute for the Physics of Complex Systems, Germany)

Stanislav Bezhanov (LPI, Russia)

Scope

- Optical properties of heated solid conductors
- Instabilities and high-frequency phenomena in photoionized plasma
- Non-linear phenomena in nonequilibrium plasma and metals
- Kinetics of rapidly heated electrons in metals and plasma

3. Ultrafast laser nanofabrication and nanophotonics

Section Chair: Sergey Kudryashov (ITMO University; LPI), email: sikudr@lebedev.ru

Program committee

Maria Farsari (FORTH, Greece)

Alex Kuchmizhak (IACP/FEFU, Russia)

Alexey Porfirev (IPSI/SNRU, Russia)

Scope

- Ultrafast nanostructured light + nanostructured matter
- Ultrafast nanophotonics
- Femtosecond-laser nanofabrication

4. Femtosecond non-linear optics. Filamentation. High field THz generation.

Section chair: Leonid Seleznev (LPI), email: seleznev@lebedev.ru

Program committee

Alexander Shkurinov (MSU, Russia)

Alexander Zemlyanov (IAO SB RAS, Russia)

Vladimir Fedorov (Texas A&M University at Qatar, Qatar)

Olga Kosareva (MSU, Russia)

Scope

- Self-compression, self-focusing and collapse
- Terahertz science
- Filamentation in various media
- High-field nonlinear phenomena

5. Femtosecond laser photobiology and photochemistry

Section Chair: Sergey Chekalin (IS RAS), email: chekalin@isan.troitsk.ru

Program committee

Andrei Razjivin (MSU, Russia)

Ivan Pozdnyakov (ICKC SB RAS, Russia)

Evegeny Ryabov (IS RAS, Russia)

Scope

- Applications of Femtosecond spectroscopy in Chemistry and Physics
- Ultrafast dynamics in molecules and clusters
- Ultrafast phenomena in Biophotonics and Photobiology
- Ultrafast spectroscopy of primary processes of photosynthesis

6. Physics and technology of ultrashort laser pulses and innovative femtosecond laser technology.

Section Chair: Pavel Kostyukov (Avesta ltd), email: pk@avesta.ru

Program committee

Alexander Konyashchenko (LPI, Russia)

Nikita Didenko (LPI, Russia)

Scope

- Solid-state, parametric, and hybrid laser systems
- Stretchers, compressors, and phase control
- Diagnostic and measurement techniques
- Innovative femtosecond laser technology

7. Femtosecond radiation in spectroscopy and optical frequency metrology.

Section Chair: Artem Golovizin (LPI), email: artem.golovizin@gmail.com

Program committee

Mikhail Gubin (LPI, Russia)

Michael Gorodetsky (MSU, Russia)

Alexey Taichenachev (ILP, Russia)

Scope

- Absolute optical frequency measurements
- Femtosecond frequency combs for direct spectroscopy of ions and atoms
- UV and HUV frequency combs
- Frequency combs in astrophysics
- Optical frequency combs applications

The sessions will start with **invited talks** (30 min), which will be followed by **regular oral talks** (15 min), and ended up by **short oral student presentations** (3 slides, 5 min).

To **register** for the Conference, please register at our website <http://ultrafastlight.lebedev.ru/en/registration/> or submit your filled **Abstract Form** electronically by email to section chairs or organizing committee chair.

Abstract submission deadline: May 15, 2018

Author acceptance notification: June 15, 2018

Conference opening: October 1, 2018

The conference fee is waived in this year.

If you need support in acquiring **visa**, sign the according checkbox during registration or write a letter to the corresponding **section chairs** or the **organizing committee**.

There are several **hotels** close to the conference venue, most notable are **Akademicheskaya** (3*, 15 min by bus) and **Korston** (4*, 15 min by foot).

Sufficient time will be allocated for **excursion and sightseeing** during the Conference.

If you have any questions, feel free to contact corresponding section chair or organizing committee chair.

Organizing committee chair: Stanislav Bezhanov, bezhanov@lebedev.ru