

LASER PHYSICS AND PHOTONICS XXIII

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The main goal of the Conference is to present new results and involve junior researches and students in the field of recent developments and applications of laser physics and photonics. The main attention will be paid to the discussion of physical processes underlying laser operation, new developments in laser design and applications, as well as the quantum and coherent properties of light and a wide scope of light-matter interaction problems, including both microscopic and macroscopic effects. Physics and technology of optical fibers and networks, photonic band-gap structures, metamaterials, optoelectronic and acoustooptical devices will be discussed.

Topics:

- Physics of lasers, dynamics of laser systems
- Optical waveguides, fiber optics, optical networks
- Photonic band-gap structures and metamaterials
- Laser beam and pulse propagation, ultrafast optics
- Interaction of laser radiation with matter, nonlinear optics
- Quantum and atom optics, quantum informatics
- Acoustooptics and optoelectronics
- Nonlinear laser spectroscopy
- Laser terahertz technologies
- Laser material processing and diagnostic technologies
- Laser microscopy, coherence and holography