

SECOND ANNOUNCEMENT



28th Summer School and
International Symposium on
the Physics of Ionized Gases

Belgrade, Serbia (29.08. - 2.09. 2016)



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website: www.spig2016.ipb.ac.rs

GENERAL INFORMATION

The 28th Summer School and International Symposium on the Physics of Ionized Gases (SPIG 2016) will take place at the Serbian Academy of Sciences and Arts in Belgrade from Monday, 29.08. to Friday, 2.09. 2016. The conference will be organized by the Faculty of Physics. The SPIG conference covers a wide range of topics from fundamental studies to applications of ionized gases. There will be two workshops associated to the conference. The program of the workshops will be announced.

ORGANIZERS



Faculty of Physics University of Belgrade



Serbian Academy of Sciences and Arts

SCIENTIFIC PROGRAMME

Program of the Conference will consist of Invited Lectures (45 min), Topical Invited Lectures (30 min), Progress Reports (20min) and Contributed Papers (poster presentations). The official language is English. The Proceedings of Contributed Papers with Abstracts of Invited Lectures and Progress reports will be published and will be available at the Conference, while the Book of Invited Lectures and Progress Reports will be published after the Conference. Contributed Papers will be refereed by the Scientific Committee. The Scientific Committee will make the final selection for oral and poster presentation. **DEADLINES:** Early registration: 15/04/2016; Abstracts of Invited lectures and Contributed papers: 12/06/2016; Invited lectures manuscripts: 31/08/2016.

PLENARY LECTURES (CONFIRMED LECTURES)

Section 1.

ATOMIC COLLISION PROCESSES

Lorenzo Avaldi (Italy): *Spectroscopy and dynamics of molecules of biological interest*

Till Jahnke (Germany): *Small helium clusters: few atoms, many phenomena*

Igor Bray (Australia): *Convergent close-coupling theory for collisions in atomic and molecular physics*

Section 2.

PARTICLE AND LASER BEAM INTERACTION WITH SOLIDS

Philippe Roncin (France): *Elastic and inelastic diffraction of fast atoms at surfaces. 2D materials, thin films, epitaxial growth*

Section 3.

LOW TEMPERATURE PLASMAS

Pietro Favia (Italy): *Plasma Processes for Life Sciences*

Jürgen Meichsner (Germany): *Influence of negative ions on the dynamics of electric gas discharges*

Pascal Boubert (France): *Optical diagnostics in high enthalpy plasmas*

Masaru Hori (Japan): *Plasma Science towards Next-generation Healthcare Innovations*

Section 4.

GENERAL PLASMAS

Roland Stamm (France): *Line shapes in turbulent plasmas*

TOPICAL LECTURES (CONFIRMED LECTURES)

Section 1.

ATOMIC COLLISION PROCESSES

Nelson de Oliveira (France): *High resolution absorption spectroscopy of transient species in the VUV*

Patrick Rousseau (France): *Molecular growth inside of (polycyclic aromatic) hydrocarbon clusters induced by ion collisions*

Denis Ceolin (France): *Photoemission on liquids in the hard X-rays regime: first studies at the GALAXIES beamline, SOLEIL synchrotron*

James Sullivan (Australia): *Positron scattering measurements from biologically relevant molecules*

Felix Julian Schulze (USA): *Realistic surface coefficients for secondary electron emission and electron reflection in PIC/MCC simulations of capacitive RF plasmas*

Section 2.

PARTICLE AND LASER BEAM INTERACTION WITH SOLIDS

Károly Tökési (Hungary): *Classical Trajectory Monte Carlo method – „Watching quantum physics in real time*

Christoph Lemell (Austria): *Attosecond streaking of photoelectrons emitted from solid surfaces*

Vito Despoja (Croatia): *Interactions of charged particles with double-layer graphene*

Li Baiwen (China): *Recent progress on numerical simulation for high-energy density plasma (HEDP) at IAPCM*

Section 3.

LOW TEMPERATURE PLASMAS

Carlos Pintassilgo (Portugal): *Gas heating mechanisms in N₂-O₂ plasmas*

Marija Gorjanc (Slovenia): *Application of plasma for development of innovative functional and protective textiles*

Ronny Brandenburg (Germany): *Barrier discharges in CO₂ containing gases at atmospheric pressure*

Manuel Macias-Montero (United Kingdom): *Synthesis of quantum dots by atmospheric pressure plasmas and their integration in photovoltaic devices*

Section 4.

GENERAL PLASMAS

Jinghong Li (China): *A Hybrid Transport-Diffusion Simulation in Laser Fusion*

René Goosmann (France): *X-ray imaging polarimetry: a new observational window in astrophysics and fundamental physics*

Giovanni La Mura (Italy): Relativistic plasmas in AGN jets: from synchrotron radiation to gamma-ray emission

Evangelia Lyratzi (Greece): *Investigating the reasons of variability in Si IV and C IV Broad Absorption Line troughs*

PROGRESS LECTURES (CONFIRMED LECTURES)

Section 1.

ATOMIC COLLISION PROCESSES

Miloš Ranković (Serbia): *Electron impact action spectroscopy of mass/charge selected macromolecular ions*

Anita Ribar (Austria): *Electron interactions with doped neon clusters*

Jaroslav Kočíšek (Czech Republic): *Electron-induced reactions in clusters*

Section 2.

PARTICLE AND LASER BEAM INTERACTION WITH SOLIDS

Xu Han (USA): *Interactions of atmospheric pressure plasma jet with liquid surfaces*

Miloš Nenadović (Serbia): *Morphological and structural properties of silver and gold nanoparticles obtained by ion implantation in high density polyethylene*

Miloš Burger (Serbia): *The role of spectroscopic diagnostics in studying laser-plasma interaction*

Sára Tóth (Hungary): *Generation of highly luminescent color centers in nanocrystalline diamond by CVD method*

Michael Huth (Germany): *Electron beam induced molecular dissociation for application in material science and solid state physics*

Yingying Zhang (China): *Interaction of moving charged particles with Triple-Walled Carbon Nanotubes (TWCNTs)*

Zoran Ristić (Serbia): *In-situ analysis of the pulsed laser deposition (PLD) fabricated LaAlO₃/SrTiO₃ heterostructures*

Section 3.

LOW TEMPERATURE PLASMAS

Zdeněk Navrátil (Czech Republic): *Electric field measurement in atmospheric pressure radiofrequency discharge in helium*

Ana Sobota (The Netherlands): *Electric fields in kHz' driven plasma jets*

Goran Sretenović (Serbia): *Measurements of the electric field development in helium plasma jets*

Sylvain Iséni (France): *Electric field and discharge properties of single and multiple arrangement of Pulsed Atmospheric Plasma Streams*

Teodora Gajo (Serbia): *Stark shift of neutral helium lines in low temperature dense plasma and the influence of Debye shielding*

Marijana Gavrilović (Serbia): *Study of single pulse laser induced breakdown on target in water*

Section 4.

GENERAL PLASMAS

Marija Vranić (Portugal): *Laser-matter interaction at the intensity frontier: on the path towards laboratory astrophysics*

Aleksandra Nina (Serbia): *Diagnostics of plasma in ionospheric D-region by VLF radio waves*

Ivan Milić (Germany): *Diagnosing plasma in the solar atmosphere using spectropolarimetry*

Bin Li (China): *Numerical Simulation of Large Scale Laser Filamentation and Beam Smoothing for Inertial Confinement Fusion*

Joël Rosato (France): *Radiation transport with partial coherence in optically thick plasmas*

ROENTDEK (TOPICAL LECTURE)

Achim Czasch (Germany): *Single particle counting: Applications in Atomic and Molecular Physics*

INSTRUCTIONS FOR AUTHORS

We kindly remind you to register (if you have not already done so) and send your Contributed papers (four pages) and Abstracts of Invited lectures and Progress Reports (one page). The sample for preparation of the Contributed papers/abstracts can be found on the Conference Website and should be sent via Paper submission service on the Website. The Scientific Committee will make the final selection for oral and poster presentation. The Proceedings of Contributed Papers with abstracts of Invited Lectures and Progress Reports will be published and will be available at the Conference.

VENUE

Serbian Academy of Sciences and Arts, Knez Mihajlova 35, Belgrade, Serbia.

ACCOMODATION

We have made a special arrangement of hotel services for the conference participants. Please visit the Conference Webpage <http://www.spig2016.ipb.ac.rs/accommodation.php> for more details.

TRAVEL INFORMATION

Belgrade can be reached by plane, train, bus, car or bicycle. Please visit the Conference Webpage <http://www.spig2016.ipb.ac.rs/travel.html> for more details.

SCIENTIFIC COMMITTEE

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