

SECOND ANNOUNCEMENT



24th Summer School and International Symposium on the Physics of Ionized Gases

Novi Sad
Serbia
August 25 – 29, 2008

Organized by:

Astronomical Observatory
Volgina 7
11060 Belgrade
Serbia



spig2008@phy.bg.ac.yu

Sponsors:

Ministry of Science,
Republic of Serbia

European
Physical Society



www.spig2008.phy.bg.ac.yu

GENERAL INFORMATION

24th Summer School and International Symposium on the Physics of Ionized Gases (SPIG) will be held in the beautiful city of Novi Sad in Serbia, from Monday, August 25 through Friday, August 29, 2008. The Conference will be organized by the Astronomical Observatory, Belgrade.

SCIENTIFIC PROGRAM

Program of the Conference will consist of Invited Lectures (45 min), Topical Invited Lectures (30 min), Progress Reports (20 min) and Contributed Papers (oral and poster presentations). The Proceedings of Contributed Papers with abstracts of Invited Lectures and Progress Reports will be published in "Publications of Astronomical Observatory" 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 and the Scientific Committee will make the final selection for oral and poster presentation. **DEADLINE** for receipt of Contributed papers (four pages) and abstracts of Invited Lectures and Progress Reports (one page) is May 15, 2008.

INVITED LECTURES (CONFIRMED LECTURES)

Section 1.

ATOMIC COLLISION PROCESSES

Gustavo García Gómez-Tejedor (Spain)

Thermalisation of high energy electrons and positrons in water vapour

Alejandro Saenz (Germany)

Atomic and Molecular Systems in Intense Ultrashort Laser Pulses

Markus Schoeffler (Germany)

Investigating few particle dynamic - atoms and molecules under the reaction microscope

Stephen Buckman (Australia)

Low Energy Lepton Scattering - Recent Results for Electron and Positron Interactions

Zoran Petrović (Serbia)

Swarms of particles in ionized gases: recent studies and implications for plasma modeling

Section 2.

PARTICLE AND LASER BEAM INTERACTION WITH SOLIDS

Matthew Goeckner (USA)

Plasma-surface interactions

Aldo Armigliato (Italy)

Characterization techniques for nano-electronics, with emphasis to electron microscopy. The role of the European Project ANNA

Jean-Pierre Gauyacq (France)

Theoretical study of excited electronic states at surfaces, link with photo-emission and photo-desorption experiments

Zoran Mišković (Canada)

Interactions of ions with carbon nano-structures

Section 3.

LOW TEMPERATURE PLASMAS

Anatoliy P. Napartovich (Russia)

Atmospheric pressure non-thermal plasma: sources and applications

Mirko Cernak (Czech Republic)

Physical and plasmachemical aspects of Diffuse Coplanar Surface Barrier Discharge as a novel atmospheric-pressure plasma source

Uwe Czarnetzki (Germany)

Stochastic Heating in Capacitive Discharges and the PSR Effect

Volker Hoffmann (Germany)

Measurement of voltage and current in continuous and pulsed rf and dc glow discharges and their meaning for analytical applications

Section 4.

GENERAL PLASMAS

Francesco Pegoraro (Italy)

Collisionless Kelvin - Helmholtz instability and vortex induced reconnection in the external region of the Earth magnetotail

Kunoiki Mima (Japan)

Laser fusion research and related high energy density plasma researches at Osaka

Milos Skoric (Japan)

Simulation Science for Fusion Plasma

TOPICAL LECTURES (CONFIRMED LECTURES)

Section 1.

ATOMIC COLLISION PROCESSES

James Sullivan (Australia)

Low Energy Positron Scattering from Helium

Section 2.

PARTICLE AND LASER BEAM INTERACTION WITH SOLIDS

Christoph Lemell (Austria)

Streaking Experiments at Solid Surfaces

Achim von Keudell (Germany)

Fundamental aspects in the plasma surface interaction during plasma sterilization

Philippe Roncin (France)

Surface and thin film analysis using Grazing Incidence Fast Atom Diffraction (GIFAD)

Section 3.

LOW TEMPERATURE PLASMAS

Edward Steers (United Kingdom)

Effects of traces of molecular gases (e.g. hydrogen, nitrogen) in glow discharges in noble gases

Deborah O Connell (Germany)

Excitation and Ionisation dynamics in high-frequency plasmas

Giorgio Dilecce (Italy)

Advances in spectroscopic diagnostics of dielectric barrier discharges

Vladimir Fortov (Russia)

Pressure-Temperature Ionization of the Nonideal Plasmas

Victor Tarasenko (Russia)

Supershort avalanche electron beams and x-ray in high-pressure nanosecond discharges

Akira Kobayashi (Japan)

Smart Coating Technology by Gas Tunnel Type Plasma Spraying

Section 4.

GENERAL PLASMAS

Dolores Calzada-Canalejo (Spain)

Spectroscopy methods applied to the research in plasmas at atmospheric pressure

PROGRESS REPORTS (CONFIRMED LECTURES)

Igor Antokhin (Russia)

X-ray formation mechanisms in massive binaries

Antonios Antoniou (Greece)

Kinematical parameters in the coronal and post-coronal regions of the Oe stars

Duško Borika (Serbia)

Channeling of protons through carbon nanotubes

Nenad Bundaleski (France)

Collisions of ions with insulator surfaces: charging and discharging dynamics

Iztok Čadež (Slovenia)

Processes with neutral hydrogen and deuterium molecules relevant to edge plasma in tokamaks

Saša Dujko (Serbia)

The Multi-term Boltzmann Equation Analysis of Non-conservative Electron Transport in Time-dependent Electric and Magnetic Fields

Richard Engeln (The Netherlands)

Unraveling the importance of surface association to the formation of molecules in recombining plasma

Eva Kovačević (Germany)

The nanoparticle formation in hydrocarbon plasmas

Gordana Majstorović (Serbia)

Spectroscopic measurements of hydrogen rotational, vibrational and translational temperatures in a hollow cathode glow discharge

Dragana Petrović (Belgium)

Modeling of a dielectric barrier discharge as a flowing chemical reactor

Nevena Puač (Serbia)

Development, diagnostic and applications of radio-frequency plasma reactors

Miroslava Vukčević (Montenegro)

Confinement and anisotropy of ultrahigh-energy cosmic rays in isotropic plasma wave turbulence

Cristina Yubero (Spain)

Importance of the van der Waals broadening for the diagnosis of plasmas at atmospheric pressure

INSTRUCTION FOR AUTHORS

We kindly remind you to register (if you have not already done that) and send your **Contributed papers** (four pages) and **Abstracts** of Invited lectures and Progress Reports (one page). The **DEADLINE** for receipt of your contributions/abstracts is **May 15, 2008**. The macro and sample for preparation of the contributions/abstracts can be found on the Conference Web page and should be send as one zipped file (zip/tgz/tar) to **spig2008@phy.bg.ac.yu**. Please label the file with your Surname and the number of Section, and in case of more contribution, add a sequential number after (e.g. Surname-Sec1-1.zip). The Contributed Papers will be refereed and 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 in **“Publications of Astronomical Observatory”** and will be available at the Conference, while the Book of Invited Lectures and Progress Reports will be published in the open access **„Journal of Physics: Conference Series“** (JPCS, <http://jpcs.iop.org/>), published by IOP Publishing.

VENUE

The SPIG2008 Conference will be held in Novi Sad, in the Conference centre "Master" (http://www.sajam.net/live/Kongresni_centar).

ACCOMMODATION

There are many hotels in Novi Sad, but we recommend you these that are within walking distance of the Conference centre: Hotel "Park" (5* - www.hotelpark.co.yu), Hotel "Sajam" (3* - www.hotelsajam.co.yu), Hotel "Novi Sad" (3* - www.hotelnovisad.co.yu), Apartments "Bonaca" (www.apartmani-bonaca.co.yu/). We arranged special rates with some of the above hotels. Please visit the Conference Web page for more details.

TRAVEL INFORMATION

Novi Sad can be reached directly by train from Budapest or Vienna, or via Belgrade by train (for timetable visit <http://www.yurail.co.yu/>) or bus (for timetable visit http://www.bas.co.yu/basweb_eng/redvoznje.asp). Belgrade can be reached by air, road and rail from major European cities. Please visit the Conference Web page for more details.

COMMITTEES

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