

# PRELIMINARY LIST OF INVITED LECTURERS

## 1. Atomic Collision Processes

### General Lectures

**M. Charlton**, Swansea University, UK  
Transport and Collision Phenomena Involving Antiparticles and Antihydrogen

**D. Gerlich**, Technische Universität Chemnitz, Germany  
Experimental Studies on  $H_n D_m^+$  collision systems  $n+m \leq 5$

**M. Stockli**, Oak Ridge National Lab, USA  
Plasma-Wall Interactions in Cesium  $H^-$  Ion Sources

### Topical Lectures

**J.-M. Bizau**, Université Paris-Sud, France  
Photoionization of Atomic and Molecular Positively Charged Ions

**R. Čurik**, J. Heyrovský Institute of Physical Chemistry of the ASCR, v.v.i., Czech Republic  
Vibrationally inelastic collisions of slow electrons with molecules

**F. Penent**, LCPMR, CNRS (UMR 7614) and Université Paris 06, France  
Single Photon Double K-shell ionization of Small Molecules

## 2. Particle and Laser Beam Interactions with Solids

### General Lectures

**D. Batani**, CELIA, University of Bordeaux, France  
Preliminary results from recent experiments and future roadmap to Shock Ignition of Fusion Targets

**U. Cvelbar**, Jozef Stefan Institute, Slovenia  
The Origin of the Plasma Grown Nanostructures at the Solid-Solid Interface

**J. Hermann**, Université Aix-Marseille II, France  
Properties of plasmas produced by laser ablation with single and double pulses

### Topical Lectures

**T. Ikeda**, Atomic Physics Laboratory, Japan  
Guiding of Slow Highly Charged Ions through Tapered glass capillaries

**V. Milosavljević**, University of Belgrade, Serbia  
Comprehensive Plasma Diagnostics for an ECR Etcher

**Juana L. Gervasoni**, Centro Atómico Bariloche, Argentina  
Title pending

### 3. Low Temperature Plasmas

#### General Lectures

**A. Bogaerts**, University of Antwerp, Belgium  
Modeling of Plasma and Plasma-Surface Interactions for Environmental, Medical and Nano Applications

**U. Ebert**, Eindhoven University of Technology, Netherlands  
Extremely far from Equilibrium: the Multiscale Dynamics of Streamers

**M. Kushner**, University of Michigan, USA  
Model Based Design of Low Temperature Plasma Reactors

**J-M. Povesle**, GREMI University of Orleans, France  
Antitumoral effect of non thermal plasmas alone or in combination with chemotherapy

**H. E. Wagner**, Ernst-Moritz-Arndt-Universität Greifswald, Germany  
The Complex Diagnostics of Barrier Discharges – an Experimental Challenge

#### Topical Lectures

**J. A. Aparicio**, Universidad de Valladolid, Spain  
Experimental transition probability measurements in Pulsed lamps: Critical points

**A. Bultel**, Université de Rouen, France  
Physico-Chemistry of Planetary Atmospheric Entry Plasmas

**E. Kovačević**, GREMI University of Orleans, France  
Plasma based formation and activation of nanoparticles and nanocomposite materials

**Đ. Spasojević**, Faculty of Physics, Serbia  
Cathode sheath and hydrogen Balmer lines modeling in a micro-hollow gas discharge

### 4. General Plasmas

#### General Lectures

**V. M. Astashinski**, National Academy of Sciences of Belarus, Republic of Belarus  
Ion-Drift Acceleration of Magnetized Plasma in Quasi-Stationary Plasma Accelerators

**G. Ferland**, University of Kentucky, USA  
Plasma simulations of general interest in astrophysics

**Hideo Nagatomo**, Institute of Laser Engineering, Osaka University, Japan  
Integrated Simulations for Laser Fusion

### Topical Lectures

**L. Campbell**, Flinders University, Australia  
Electron Impact Excitation in Planetary and Cometary Atmospheres

**N. B. Nassib**, INSAT, University of Carthage, Tunisia  
Ab Initio Determinations of Stark Broadening Parameters and Applications in Astrophysics

**T. Popov**, St. Kliment Ohridski University of Sofia, Bulgaria  
Evaluation of Plasma Potential and Electron Energy Distribution Function by Langmuir Probes in Magnetized Plasma

**J. Rosato**, Aix Marseille University, France  
Plasma Spectroscopy in the Conditions of the Iter Tokamak

**T. Watanabe**, National Institute for Fusion Science, Japan  
Kinetic Transport Simulation Studies for Helical Plasma Confinement

### Progress Reports

**A. Antoniou**, University of Athens, Greece  
The Structure of Si IV Region in Be Stars; a Study of Si IV Spectral Lines in 68 Be Stars

**N. Cvetanović**, Faculty of Transport and Traffic Engineering, Serbia  
Investigation of Energetic Hydrogen Atoms in Glow Discharges

**M. Coreno**, Elettra Sincrotrone Trieste and CNR, Italy  
On the Work that we're Carrying out at Elettra on the Novel Ultrafast VUV sources CITIUS and FERMI FEL

**S. M. D. Galijaš**, Faculty of Physics, Serbia  
Two-State Vector Model of the Nonresonant Population of the Rydberg States of Multiply Charged Ions Interacting with Solid Surfaces

**N. Gavrilović-Bon**, Astronomical Observatory Belgrade, Serbia  
Stellar Population in the sample of Type 2 Active Galactic Nuclei

**J. Kovačević**, Astronomical Observatory Belgrade, Serbia  
The properties of the emission lines and their correlations in the spectra of Active Galactic Nuclei

**D. Kubala**, University of Fribourg, Switzerland  
Dissociative Electron Attachment to Small Model Molecules

**S. Lazović**, Institute of Physics, Serbia  
Diagnostics and Biomedical Applications of Radiofrequency Plasma

**M. Majkić**, Faculty of Physics, Serbia  
Intermediate Stages of the Neutralization of Multiply Charged Slow Ions Interacting with Solid Surfaces

**A. Mihelič**, Jožef Stefan Institute, Slovenia  
Studies of Multiphoton Processes in Noble Gas Atoms

**S. Petrović**, Vinča Institute of Nuclear Sciences, [Serbia](#)  
Composition and structure modification of a WTi/Si system by nanosecond and picosecond laser pulses

**M. Radović**, Vinča Institute of Nuclear Sciences, [Serbia](#)  
Low Dimensional Ti-Oxide Based Structure: From SrTiO<sub>3</sub> to TiO<sub>2</sub>

**M. Ristić**, Faculty of Physical Chemistry, Serbia  
Differential Cross Sections at 0° and 180° for Electron Impact Excitation of H<sub>2</sub> and CO

**N. Šišović**, Faculty of Physics, Serbia  
Spectroscopic study of hydrogen Balmer line shapes in a hollow cathode glow discharge in NH<sub>3</sub>, Ar/NH<sub>3</sub>, Ar/CH<sub>4</sub> and Ar/C<sub>2</sub>H<sub>2</sub> mixtures

**N. Škoro**, Institute of Physics, Serbia  
Breakdown and discharge regimes in standard and micrometer size DC discharges

**D. Tankosić**, USRA/NASA – Marshal space Fight Center, USA  
Laboratory Studies of Charging Properties of Dust Grains in Astrophysical/Planetary Environments

**S. Tošić**, Institute of Physics, Serbia  
Measurements of Differential Cross Sections for Elastic Electron Scattering and Electronic Excitation of Metal atoms

**G. Wachter**, Vienna University of Technology, Austria  
Electron emission from a metal nanotip by ultrashort laser pulses

**M. Zlatar**, Institute of Chemistry, Technology and Metallurgy, Serbia  
Dissociative Electron Attachment Measurements and TDDFT Calculations of the Excitation Energies in Pt(PF<sub>3</sub>)<sub>4</sub> : Synergy Between Experiment and Theory