

GENERAL INFORMATION

21st Summer School and International Symposium on the Physics of Ionized Gases (SPIG) will be held in Sokobanja in Serbia, Yugoslavia, from Monday, August 26 through Friday, August 30, 2002. The Conference is organized by the Department of Physics, Faculty of Sciences and Mathematics, University of Niš.

SCIENTIFIC PROGRAMME

Programme of the Conference will consist of Invited lectures (40 min) in plenary sessions, Topical Invited lectures (30 min) and Progress reports (20 min) in parallel sessions, as well as Contributed papers (oral and poster session). The Proceedings of Contributed Papers with abstracts of Invited lectures and Progress reports will be available at the Conference, while the Book of Invited Lectures and Progress Reports will be distributed after the Symposium.

TRAVEL INFORMATION

Special bus tours between Belgrade and Sokobanja will be organized for the SPIG participants on Sunday 25th and Friday 30th August. The bus will depart from the Belgrade Airport at 4 p.m., and from the Main Railway Station half an hour later. It is also possible to use a regular bus to Sokobanja from the Belgrade Main Bus Terminal, or to take the bus to Aleksinac (every hour), and another local bus to Sokobanja.

REGISTRATION

The registration fee will include the cost of admission, the Conference Proceedings and the Book of Invited Lectures. Regular conference fee will be EUR 100,00 while full time students will be charged EUR 50,00. Accompanying persons should pay full accommodation expenses as well as the registration fee of EUR 20,00 which will cover the reception cocktail, conference dinner, excursion and other social activities. The registration fee will be payable in cash in Yugoslav dinars at the conference desk during the SPIG. The facilities to exchange foreign currency will be available at the hotel reception desk.

ACCOMMODATION

Participants will be accommodated in the "Zdravljak" hotel in Sokobanja, where all the conference activities will be organized as well. The hotel is equipped with swimming pool, sauna room, bowling halls, sport grounds and other usual hotel facilities. The cost of daily board and lodging will range from 15 to 25 EUR per person, depending on the room type. The interested participants have to contact the Organizing Committee in order to book the desired room type.

PAYMENTS

All payments should be made in cash at the Conference desk in Yugoslav currency. Please note that the Conference staff and local banks cannot deal with travelers checks or credit cards.

ADDRESS FOR CORRESPONDENCE

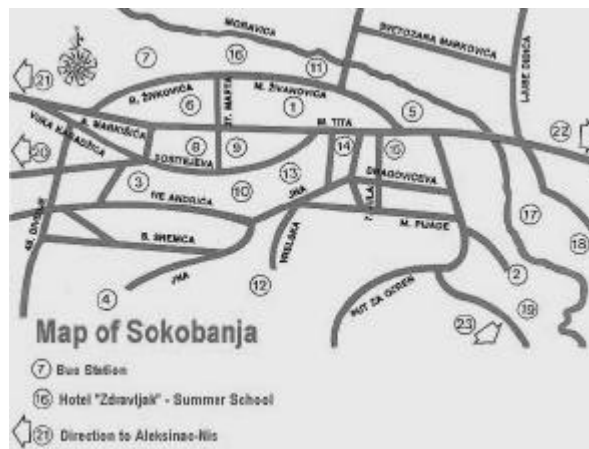


SPIG – 2002

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21st Summer School and International Symposium on the Physics of Ionized Gases

21st SPIG

*SOKOBANJA, Yugoslavia
August 26-30, 2002*

<http://www.pmf.ni.ac.yu/spig2002/>



**DEPARTMENT OF PHYSICS
FACULTY OF SCIENCES
AND MATHEMATICS
UNIVERSITY OF NIŠ**

CONFERENCE TOPICS

Section 1. ATOMIC COLLISION PROCESSES

- 1.1. Electron and Photon Interactions with Atomic Particles
- 1.2. Heavy Particle Collisions
- 1.3. Swarms and Transport Phenomena

Section 2. PARTICLE AND LASER BEAM INTERACTION WITH SOLIDS

- 2.1. Atomic Collisions in Solids
- 2.2. Sputtering and Deposition
- 2.3. Laser and Plasma Interaction with Surfaces

Section 3. LOW TEMPERATURE PLASMAS

- 3.1. Plasma Spectroscopy and Other Diagnostics Methods
- 3.2. Gas Discharges
- 3.3. Plasma Applications and Devices

Section 4. GENERAL PLASMAS

- 4.1. Fusion Plasmas
- 4.2. Astrophysical Plasmas
- 4.3. Collective Phenomena

SCIENTIFIC COMMITTEE

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J. Karamarković, N. Novaković, M. Pejović.

INVITED LECTURES

M. Allan (Switzerland): "Recent electron-molecule collision experiments"
V. Astashinskii (Belarus): "Plasma Dynamic Processes Accompanying High Energy Compression Flows Interaction with Surfaces"
D.S. Belic (YU): "Ionization and dissociation of N_2^+ and O_2^+ ions by electron impact"
W. Bolse (Germany): "Atomic transport in swift heavy ion tracks"
S. Buckmann (Australia): "Atomic Physics Research with Laser-Cooled Metastable Helium Atoms"
V. Cadez (Belgium): "Space Weather: Solar activity and its effects on the Earth"
S. Dhar (Germany): "Ion-beam induced reactions in Fe/Si bilayers"
V. Godyak (USA): "Plasma parameters of low pressure ICPs"
M. Gigoso (Spain): "Computer simulated hydrogen line profiles for non equilibrium plasma diagnostics"
K. Homewood (UK): "Ion Beam Engineered Silicon Light Emitting Diodes"
G.P. Karwasz (Italy): "Integral cross section for electron scattering on molecules-from beam to swarm experiments"
P. Krstić (USA): "Nearly-Adiabatic Atomic Physics: Methods-Data-Devices"
T. Makabe (Japan): "Introduction to VicAddress Vertically integrated CAD for device processing"
A. Maquet (France): "Atomic response to intense and ultra-intense laser pulses"
E. Mediavilla (Spain): "2D spectroscopy of ionized gas in gravitational lenses"
H. Nagatomo (Japan): "Computational Simulation for Laser Fusion in ILE Osaka"
M. Okamoto (Japan): "Transport and radial electric field in torus plasma"
S. Raikov (Belarus): "Intracavity Laser Spectroscopy of Laser Ablation Plasma"
P. Schaaf (Germany): "Reactive surface modifications by laser beams with and without employing a plasma"
G. Shao (China): "Transmission electron microscopy of ion beam synthesized semiconducting thin films"

Y. Serruys (France): "Measurement of 3He diffusion in ceramics using nuclear reaction spectrometry"
M. Tanaka (Japan): "Experimental Study on Vortex Formation in Plasmas"
H. Thomas (Germany): "Plasma-induced finishing of textile fibres"
S. Vladimirov (Australia): "Collective and dynamic phenomena in complex plasmas"
R. Webb (UK): "The computer simulation of cluster/molecule surface interaction"

PROGRESS REPORTS

R. Panajotović (USA): "Cross section for elastic and inelastic electron scattering from C_2H_4 , C_2F_4 and C_4F_8 "
P. Beličev (YU): "Influence of spiral inflector on transversal beam emittance"
A.I. Strinić (YU): "Excitation coefficients for atomic and ionic levels of rare gases and methane"
ZL. Mišković (YU): "Non-stationary and vicinage effects on charge state of fast atomic, molecular and cluster ions in thin foils"
B.M. Gaković (YU): "Surface modification of titanium based thin films/coatings by pulsed IR laser beam"
Lj.D. Nedeljković (YU): "Quantum teleology of the ion-surface interactions"
Z.M. Marković (YU): "Kinetics of fullerene formation in plasma arc reactor"
I. Stefanović (Germany): "Particle build-up and decay in low temperature reactive plasmas"
P.Lj. Stefanović (YU): "Thermal and flow conditions for the plasma synthesis of ultrafine silicon-nitride powder"
M.S. Dimitrijević (YU): "Applications of the modified semiempirical method for stellar plasma investigations"
L.C. Popović (YU): "The microlensing influence on AGN spectral line shapes: from X-ray to the optical wavelength range"
M.S. Jovanović (YU): "Electromagnetic solitons in relativistic laser-plasma interaction"
M. Radmilović-Radjenović (YU): "Modeling of Non-equilibrium Low-Pressure Discharges Using Monte Carlo Method"
G.B. Poparić (YU): "Electron impact excitation of valence and Rydberg states of N_2 and CO"