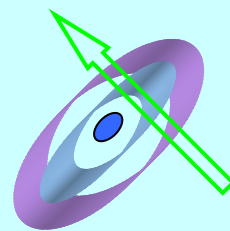


APPLICATION OF LASERS IN ATOMIC NUCLEI RESEARCH



VI International Workshop LASER METHODS IN THE STUDY OF NUCLEI, ATOMS AND MOLECULES

May 24-27, 2004
Poznań, Poland

Welcome to the web site of the **VI International Workshop on Application of Lasers in Atomic Nuclear Research**. Here you will find information about the workshop including registration, accommodations and a summary of important dates.

SECOND BULLETIN

This is the second circular of the Sixth International Workshop on Application of Lasers in Atomic Nuclei Research. The Conference is hosted by the Faculty of Physics, Adam Mickiewicz University (AMU), Poznań, Poland. The Conference will be held from 24 to 27 May, 2004.

SCIENTIFIC PROGRAMME. The scientific programme is based on the advice and comments from the members of the International Advisory Committee. It includes invited talks (30 min) and shorter oral presentations (20 min).

The working language of the Conference is English.

The organizing committee of the workshop would like to remind that the deadline for the application was March 1, 2004. 37 talks have been announced so far (please find enclosed the list of them), but there is a possibility to accept essential more talks. For this reason, the organizing committee decided to put off the deadline until April 15, 2004. Correspondingly the final bulletin will appear on our website at the end of April. Those interested in attending should indicate their intent by registering via the LASER2004 web-site, or by returning the attached Application Form.

The following talks have been announced (some titles are preliminary):

H. Backe (Mainz) - invited speaker
Heavy Element Research with Laser Spectroscopy and Traps

D. Balabanski (Camerino)
Moments of high-K isomers

J. Billowes (Manchester) - invited speaker
The laser spectroscopy programme at the Jyvaskyla IGISOL

F. Le Blanc (Orsay) - invited speaker
Laser spectroscopy at the new fission fragment facility in Orsay: ALTO.

Chairmen:

Z. Blaszczak (Poland)
B. Markov (JINR, Russia)

Scientific secretary:

K. Marinova (JINR, Russia)

Organizing Committee:

J. Billowes (Manchester, UK)
S. Choinacki (Warsaw, Poland)
J. Dembczyński (Poznan, Poland)
Yu.P. Gangrsky (JINR, Russia)
W. Nawrocik (Poznan, Poland)
Yu.E. Penionzhkevich (JINR, Russia)
S.G. Zemlyanoi (JINR, Russia)

International Advisory Committee:

H. Backe (Mainz, Germany)
F. Le Blanc (Orsay, France)
P. Van Duppen (Leuven, Belgium)
V. Fedoseev (CERN)
T.T. Inamura (RIKEN, Japan)
H.J. Kluge (GSI, Germany)
J. Kownacki (Warsaw, Poland)
V.I. Mishin (Troitsk, Russia)
R. Neugart (Mainz, Germany)
Yu. Oganessian (JINR, Russia)

K. Blaum (CERN)

Unambiguous identification of three β -decaying isomers in ^{70}Cu

K. Blaum, W. Geithner, K. Marinova, J. Lassen, P. Lievens and R. Neugart (Mainz-CERN)

Nuclear Charge Radii of Argon Isotopes in $f_{7/2}$ Shell and Systematics of Charge Radii in the Calcium Region

D. Borremans (Leuven) - invited speaker

g-Factors and Quadrupole Moments of Neutron Rich Nuclei around N=8 and N=20

M. Bruce (Manchester)

New beams and laser spectroscopy with the ISOLDE RILIS

A. Ezwam (Manchester)

A solid xenon catcher for rare isotope laser spectroscopy

M. Facina (Leuven)

A gaz cell for stopping, storing and guiding radioactive ions: on line studies at LISOL

V. Fedosseev (CERN) - invited speaker

Laser ion source at ISOLDE/CERN

Yu.P. Gangrsky (Dubna)

Laser spectroscopy on the fission fragment beams

V. Gheorghe (Mainz)

Nonclassical States in Combined Traps

Ch. Geppert (Mainz) - invited speaker

LIST - a Laser Ion Source for Selective Resonant Ionization of Radionuclides

S. Hoekstra (Groningen)

Atom trap trace analysis of ^{41}Ca

T. Inamura (RIKEN)

Pumping Th229m by Hollow-Cathode Discharge

I. Izosimov (St.Petersburg)

Chemiluminescence of solutions induced by actinides excited by laser radiation.

I. Izosimov (St.Petersburg)

TOF_RIS laser spectroscopy in weak collimated atomic beams

F.F. Karpeshin (St. Petersburg)

Electron shell of atom as resonator in the nuclear transitions

R. Kiefl (TRIUMF)

Low Energy Spin Polarized ^8Li and Its Applications In Condensed Matter Physics

M. Kowalska (CERN)

Laser spectroscopy and beta-NMR measurements of short-lived Mg isotopes

T. U. Kuehl (Darmstadt)

PHELIX Project - Petawatt High-Energy Laser for Heavy-Ion Experiments

Yu. Kudryavtsev (Leuven) - invited speaker

On-Line Ion Source based on Laser Ionization in a Gas Cell

P. Kunz (Mainz)

Trace Analysis and Spectroscopy on Plutonium

J. Lassen (TRIUMF)

Plans for a Laser Ion Source at TRIUMF

W. Lauth (Mainz)

Laser Spectroscopy of Fermium

Zheng-Tian Lu (Argonne) - invited talk

Atom Trap, Krypton-81, and Saharan Water

Zheng-Tian Lu (Argonne)

Measuring the charge radius of ${}^6\text{He}$ nucleus

A. Nieminen (Jyväskylä)

LIST method for producing isobarically pure ion beams at IGISOL

W. Nörtershäuser (Darmstadt)

First results for the charge radii of Li-8,9

L.Pavlov (Sofia)

Tunable ultraviolet laser source for laser spectroscopy of new nuclei and ions

Yu.E. Penionzhkevich (JINR) - invited speaker

Production and study of exotic nuclei

J. Persson (Kristianstad University, Sweden)

Calculations of the Bohr-Weisskopf effect in the lanthanides

M. Roth (Darmstadt)

Laser accelerated, high-quality ion beams

U. Schramm (Munich) - invited speaker

Laser Cooling of Ion Beams

K. Wendt (Mainz) - invited speaker

Laser based techniques in ultratrace isotope production, spectroscopy and detection

D.F. Zaretsky (Moscow)

The Coulomb explosion of clusters in a magnetic trap and thermonuclear synthesis

S.G. Zemlyanoi (Dubna)

Laser spectroscopy of transuranium elements

TIME-TABLE OF THE WORKSHOP:

Arrival date; registration: Sunday, May 23, 2004

Departure day: Friday, May 28, 2004

| <i>Monday</i> <i>05.24</i> | <i>Tuesday</i> <i>05.25</i> | <i>Wednesday</i> <i>05.26</i> | <i>Thursday</i> <i>05.27</i> |
|---|--|--|---|
| Registration 9:00-10:00 | Session 9:00-11:00 | Session 9:00-11:00 | Session 9:00-11:00 |
| Opening 10:00-10:30 | Session 11:20-13:00 | Session 11:20-13:00 | Session 11:20-13:00 |
| Session 10:50-13:00 | | | |
| Lunch 13:00-14:30 | Lunch 13:00-14:30 | Lunch 13:00-14:30 | Discussion 14:30-17:00 |
| Session 14:30-16:00 | Session 14:30-16:00 | Excursion | |
| Session 16:20-18:00 | Session 16:20-18:00 | | |
| <i>Welcome party</i> | <i>Dinner</i> 19:00 | <i>Dinner</i> 19:00 | <i>Farewell</i> <i>dinner</i> 19:00 |

PROCEEDINGS: Proceedings of the Workshop will be published by the JINR Publishing Department and will have specific guidelines as to format and length. Details will be provided in the final Bulletin.

WORKSHOP FEE: The regular registration fee for participants in the Workshop amounting to 150 Euro covers the Conference Proceedings, the welcome reception, the conference lunches and dinners, all coffee breaks, the cultural events and the

transportation to the Faculty of Physics of AMU in Poznań-Morasko and back. The registration fee for accompanying persons amounting to 100 Euro includes all the Conference social program activities as well as some cultural events.

ACCOMMODATION: The accommodation will be organized in the Hotel "JOWITA". It is situated in the vicinity of the Poznań railway station and at a walking distance from the downtown area. The Hotel can be very easily found: the "CENTRA AKUMULATORY BATERIE" sign on the top of the hotel building can be a good guide. The room rates per night, including breakfast, starting from the afternoon of May 23 to the morning of May 28, 2003 (the arrival and departure dates), will be:

Single room – 16 EUR/night

Double room – 24 EUR/night

Double room deluxe – 28 EUR/night

Breakfast and dinners will take place at Hotel "JOWITA", lunches at the Faculty of Physik, AMU. Transportation will be organized from this Hotel to the Workshop centre at the Faculty of Physics, AMU and back.

FINANCIAL SUPPORT: The organizing committee has set the workshop fee as low as possible to encourage a good attendance. As one can see above, with an exception of the accommodation, the fee covers all expenses during the workshop. Laser 2004 is a relative small workshop for which no sponsors have been found. Thus the funds available to help speakers with particular financial difficulties are extremely limited. The organising committee hopes speakers will understand this and be able to obtain support from their home institutions. Speakers with particular difficulties are invited to contact the organising committee.

PAYMENT: The regular registration fees will be accepted cash during registration upon arrival. The payment of the accommodation will be done personally at the hotel administration desk.

INSURANCE: The organizers advise all participants to take care that they have their own personal, travel and luggage insurance.

LETTERS OF INVITATION: The Organising Committee will send upon request official invitation letters necessary for completing any formalities (visas, travelling grants from some home institutes, etc.). Please contact the Workshop Chairman:

Prof. Z. Blaszcak,

Faculty of Physics Adam Mickiewicz University,
ul. Umultowska 85, 61 - 614 Poznań, Poland

Fax: (48-61)-8-257-758

E-mail: zetbe@main.amu.edu.pl

VISAS: Foreign delegates are advised to inquire at the nearest

Polish Consulate or Embassy whether a visa is required for their stay in Poland. For arranging visas participants are requested to inform the Workshop Chairman of their full name, address and affiliation.

TRAVEL TO WARSAW: The workshop participants are kindly invited to visit to the Heavy Ion Laboratory of the Warsaw University on Friday, the 28th of May and Saturday, the 29th of May and continue the discussion about possible collaboration. The room rate at the Hotel of the Warsaw University is about 20 Euro/night.

DEADLINES:

- | | |
|-----------------------------------|------------------|
| Application | ▪ April 15, 2004 |
| Final bulletin | ▪ April 30, 2004 |
| Participation in the Warsaw visit | ▪ April 30, 2004 |