

# **ION BEAMS**12

## **Multidisciplinary Applications of Nuclear Physics with Ion Beams**

June 6<sup>th</sup>-8<sup>th</sup>, 2012

Laboratori Nazionali di Legnaro (Padova), Italy

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### **SECOND CIRCULAR**

#### **SCOPE OF THE CONFERENCE**

The conference will be held at the I.N.F.N. Laboratori Nazionali of Legnaro (Padova, Italy) in the frame of the celebration of the 50<sup>th</sup> anniversary of the foundation by the Padova University of the “Laboratorio dell’Acceleratore di Ioni di Legnaro” (1961) as an initiative of Prof. A. Rostagni with the installation of a 5.5 MV CN Van de Graaff Accelerator to contribute to the promotion and the development of nuclear physics researches in Italy. As a result of the agreement between the University of Padova and the I.N.F.N (Istituto Nazionale di Fisica Nucleare) signed in 1968, the Legnaro Laboratory became the Laboratori Nazionali di Legnaro providing a national facility serving as focal point in the development of fundamental and applied nuclear physics in Italy achieving during the years the status of a Large international Nuclear Facility as shown by the installation of various ion beam accelerators (the 2MV AN2000 Accelerator operational in 1971, the 16 MV XTU Tandem Accelerator operational in 1981 and the ALPI Superconducting LINAC operational in 1991).



The centre has a pretty large interdisciplinary research equipment developed in the last 50 years including three ion accelerators devoted to interdisciplinary studies, which deliver several thousands beam-time hours per year to external and internal users. At present about 50 national and international user groups are using the interdisciplinary facilities in the following scientific areas:

- Radiation Interaction and Damage
- Surface Modification
- Materials Science
- Nuclear Data Acquisition and Analysis
- Ion Beam Analysis and Channeling
- Environmental Sciences
- Art and Archaeology
- Dosimetry, Microdosimetry, Nanodosimetry
- Radiation Biophysics and Medicine.

The Conference will present the state of the art of applications of ion beam techniques in interdisciplinary fields at international level through a few invited talks of recognized experts and will outline the status of research with ion beams and facilities in Italy.

### **List of invited speakers**

- D.K. Avasthi (IUAC, New Delhi, India)
- J.C. Dran (C2RMF-Centre de recherche et de restauration des musées de France, Palais du Louvre, Paris, France)
- L.C. Feldman (Institute for Advanced Materials, Devices and Nanotechnology, Rutgers University, USA)
- M. Hill (CRUK/MRC, Gray Inst. for Radiation Oncology and Biology, Oxford, UK)
- W. Möller (Helmholtz-Zentrum Dresden-Rossendorf, Germany)
- C. Pacheco (C2RMF-Centre de recherche et de restauration des musées de France, Palais du Louvre, Paris, France)
- H. Rabus (Physikalisch-Technische Bundesanstalt, Braunschweig, Germany)
- M. Toulemonde (CIMAP Laboratory, Caen, and GANIL, France)
- R. Webb (Surrey Ion Beam Centre, University of Surrey, Guildford, UK)
- A. Zucchiatti (Centro de Micro Análisis de Materiales, Universidad Autónoma de Madrid, Spain)

### **Presentations of Italian Ion Beam Facilities**

- M. Bianconi (CNR-IMM, Bologna, Italy)
- L. Calcagnile (Centro Datazione e Diagnostica, Università del Salento, Lecce, Italy)
- L. Campajola (Dipartimento di Scienze Fisiche, Università di Napoli Federico II and INFN Sez. di Napoli, Italy)
- G. Cuttone (INFN Laboratori Nazionali del Sud, Catania, Italy)
- M. G. Grimaldi (Dipartimento di Fisica e Astronomia, Università di Catania, and MATIS CNR-IMM, Catania, Italy)
- P. Mandò (Università di Firenze and INFN LABEC Firenze, Italy)
- V. Rigato (INFN Laboratori Nazionali di Legnaro, Italy)
- F. Terrasi (CIRCE, INNOVA and Dept. of Environmental Sciences – Sec. Università di Napoli, Italy)
- C. Ur (INFN Padova, Italy)

### **SCIENTIFIC PROGRAMME**

The updated scientific programme of the conference is available on the Conference web page (<http://ionbeams12.inl.infn.it>).

### **ORAL and POSTER PRESENTATIONS**

Invited speakers are allowed for a total time of 35 minutes (30' talk +5' discussion). The allotted time for oral presentations is 20 minutes (15' talk + 5' discussion). Please, check the scientific programme for details about the allotted time of your contribution.

Posters may be affixed starting from Wednesday, June 6<sup>th</sup>. The dimension requested is A0 format (841 × 1189 mm). The poster session is scheduled on Thursday, June 7<sup>th</sup> at 10:50-11:30 and at 15:25-16:15.

### **PROCEEDINGS / MANUSCRIPT SUBMISSION**

Selected oral and poster contributions will be published in the Proceedings of the Conference in a dedicated AIP volume (<http://proceedings.aip.org/>). Presenters must submit an electronic version of their manuscript at the conference registration desk or by e-mail ([ionbeams@inl.infn.it](mailto:ionbeams@inl.infn.it)) by **June 8<sup>th</sup>**. Invited speakers may send their contribution by **June 22<sup>nd</sup>, 2012**.

Authors are requested to submit their manuscript following the instructions and templates contained in the 6x9 inch format booklet available on the AIP Conference Proceedings site (<http://proceedings.aip.org/outline/6x9>). The manuscripts must be black and white, any supplied color graphics will be converted to black and white.

The length of the manuscript must not exceed 8 pages.

Upon submission, authors must fill in and sign also the Transfer of Copyright Agreement ([http://scitation.aip.org/proceedings/tca\\_blank.pdf](http://scitation.aip.org/proceedings/tca_blank.pdf)) and, if necessary, the Request for Permission to Reprint Published Material (<http://scitation.aip.org/proceedings/permission.pdf>) forms.

### **VENUE and TRAVEL**

The conference will be held at Laboratori Nazionali di Legnaro (Padova). Legnaro is only 10 Km (6 miles) from Padova. Details on transportation and routes to Legnaro are available on the conference web page. A **transfer service** from the hotels in Padova to LNL in the morning and back in the evening is organized for the whole conference. Pick-up points and pick-up times will be indicated later on the conference web site. Participants who intend to use this service are invited to tick the appropriate field in the registration form.

### **REGISTRATION and ACCOMMODATION**

The registration fee after April 30 is **400€**. The fee for accompanying persons is **50€** for the social dinner.

	<b>After April 30</b>
<b>PARTICIPANT</b>	400€
<b>ACCOMPANYING PERSON</b>	50€

The Participant registration fee includes:

- transportation between Padova Hotels and the conference site;
- lunches at LNL canteen from Wednesday June 6 to Friday June 8;
- coffee breaks;
- social dinner;
- the book of abstracts;
- a copy of the AIP Conference Proceedings.

The Accompanying Person's fee includes:

- conference dinner.

After having registered on the Conference site, **please refer to the Agenzia Leonardi's web site** ([https://www.leonardiviaggi.com/ion\\_pl\\_en.php?htl=1](https://www.leonardiviaggi.com/ion_pl_en.php?htl=1)) for **ACCOMMODATION and PAYMENT**.

Payment can be made by credit card using the e-payment system of the Agenzia Leonardi's web page or by bank transfer. Agenzia Leonardi will confirm your reservation and will acknowledge payment after receipt of the fee.

If you choose to pay by bank transfer it is very important that your name and the name of the conference is clearly mentioned on the transfer. A duplicate or a photocopy of the transfer order issued by the bank must be mailed or faxed to Agenzia Leonardi.

***N.B.: Please make sure that the full conference fee is transferred into the conference bank account and that any charges incurred are paid by your account.***

Bank transfers should be made to the following bank account:

Agenzia Viaggi e Turismo Leonardi – Corso del Popolo 14, Padova – Italy  
Banca Nazionale del Lavoro – BNL  
IBAN: IT88D0100512101000000004070  
REFERENCE: "ION BEAMS 12 – YOUR NAME"

In case registration fees are not credited on time to the conference account, participants are advised to bring with them a copy of their proof of payment (bank transfer or other justification) or their acknowledgement of receipt.

For your reference:

Agenzia Viaggi e Turismo Leonardi  
Corso del Popolo 14, Padova, Italy  
Ph.: +39-049-650455 Fax: +39-049-661391  
e-mail: [raffaella@leonardiviaggi.com](mailto:raffaella@leonardiviaggi.com)

**Cancellation:** in case of written cancellation before May 18, the registration fee will be refunded. After this date no refund will be possible.

### **SOCIAL EVENTS**

During the conference the following events are planned:

- ✓ On **Thursday, June 7**, the conference dinner will take place at Restaurant Baretta, Legnaro (Padova). Participants who intend to attend these events are invited to tick the appropriate fields in the registration form.
- ✓ On **Friday, June 8**, the celebration of the 50<sup>th</sup> anniversary of the foundation of Legnaro Laboratories will be held in Villi meeting room from 14:00 to 18:10. Light refreshments will be served afterwards. ION BEAMS '12 participants are invited to take part in the ceremony. Please, take notice that the official language of this meeting will be Italian.

We would be grateful if you could bring this announcement to the attention of your colleagues.

Updated information concerning the Conference is available on the web site <http://ionbeams12.lnl.infn.it/>. For any inquiry you may contact [ionbeams12@lnl.infn.it](mailto:ionbeams12@lnl.infn.it).

Looking forward to seeing you at Laboratori Nazionali di Legnaro,

The Organizing Committee

*Renato Angelo Ricci (Chair)*  
*Valentino Rigato (Scientific Secretary)*  
*Roberto Cherubini*  
*Paolo Colautti*  
*Augusto Lombardi*  
*Paolo Mazzoldi*  
*Calin A. Ur*

### **CONTACT ADDRESS**

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web page: <http://ionbeams12.lnl.infn.it/>