

ABNP 2014

Workshop on Accelerator based Neutron Production

April 14th-15th, 2014

Laboratori Nazionali di Legnaro (Padova), Italy

SECOND CIRCULAR

The workshop "ABNP2014" will be held from 14th to 15th April 2014, at Laboratori Nazionali di Legnaro, Legnaro ITALY. The Conference programme will begin on Monday, April 14th at 9.00 and will close on Tuesday, April 15th in the afternoon. The Workshop is organized in the framework of the Accelerator Application Network Activity (Work Package 4 of EUCARD2 GA 312453 Project), to foster knowledge of the applications capability of accelerators.

SCOPE OF THE WORKSHOP

The focus of the workshop will be on the perspectives of intense neutron sources, in particular the requirements for the neutron spectra, the technological challenge of target with concentrated power deposition, and on their applications. Subtopics are:

- Target cooling.
- High power beams (with cyclotrons or RFQ/ESQ or other accelerators).
- BNCT (boron neutron capture therapy).
- Isotope preparation.
- Spectra of neutrons (epithermal, thermal, few MeV, or other).

The scope of the workshop covers:

- comparison of liquid targets and strongly cooled solid targets, cooling by liquid metals, safety of target in relation to site;
- design of target for BNCT optimized spectra, spectra peaked to low energy neutron, neutron moderator;
- production of medical isotopes with accelerators, BNCT applications, high power beam accelerators;
- other applications of Accelerator based neutron production, including SEE (Single Event Effects) radiation damage studies in electronics and detectors calibration, Gen-IV-reactor-like neutron spectrum emulators for nuclear transmutation studies and integral cross section measurements, material science application, neutron sources for art and heritages investigations.

SCIENTIFIC PROGRAMME

The scientific programme will consist of invited and contributed presentations. Presenters are encouraged to submit the title and the abstract of their possible presentations. A poster session may be also organized if necessary.

ABSTRACT SUBMISSION

We encourage the submission of original contributions in the indicated scientific areas. The Scientific Committee will select some original contributions for oral and possibly poster presentation.

Authors are invited to submit abstracts using the INDICO web-interface available on the [Conference web page](#). The deadline for submitting abstracts is **Saturday, 8th March 2014**. Modification of submitted abstracts is possible through the same INDICO system until March 8. An agenda of the meeting and time allotted for presentations will be available by **Saturday, 29th March 2014**.

Please note that the first time that you use the INDICO system you must follow the instructions to create your own INDICO account.

VENUE and TRAVEL

The meeting will be held at the Laboratori Nazionali di Legnaro of the INFN, Viale dell'Università 2, LEGNARO (Padova), Italy. Legnaro is only 10 Km (6 miles) from Padova. Details on transportation and routes to Legnaro are available on the [conference web page](#).

For participants arriving at **Venice Airport**, in addition to regular buses, there are also private shuttle connections from the Airport to Padova or Legnaro Laboratories. You can contact:

- LANDOMAS BLUE SERVICE
<http://www.landomas.it/> - Ph. +39 049 8600382; e-mail landomas@landomas.it.
- AIRSERVICE Padova
<http://www.airservicepadova.it/> - Ph. +39-049-8704425; e-mail reservation@airservicepadova.it.

The cost per transfer ranges from 30€ to higher costs depending on arrival time. Payment can be made directly to the driver. The service must be booked at least 24 hrs in advance. Further details will be available on the third circular.



TRANSFER FROM PADOVA HOTELS TO LNL and BACK

A transfer service will be organized every day from Padova hotels to Legnaro Laboratories and back. Pick-up points and times will be given later. Should you miss the Workshop bus, please, be informed that regular buses connect Padova to Legnaro about every 30 min in office hours as better mentioned on the web page.

REGISTRATION

The Workshop is supported by EUCARD2 Project and INFN; no registration fee is requested. Registration to this event is available at the [Conference website](#) via INDICO system from January 24th until **April 4th, 2014**. For organization purposes, early registration is appreciated.

LUNCHES

Lunches on April 14th and 15th will be served at LNL canteen at the price of 8,13€. A working dinner is planned at a Restaurant near LNL on April 14th evening. Participants are kindly asked to indicate their participation on the registration form along with any possible dietary restriction.

ACCOMMODATION

A number of rooms (single, double, double for single occupancy) have been blocked at the hotels listed on the Conference web page. The deadline for reservation is **March 21, 2014**. You are kindly asked to make your reservation by that date, since there are many simultaneous events in Padova.

Please, make your booking by e-mail, phone or fax (not via web portals) and refer to the “**ABNP 2014 Workshop**” to obtain special rates. A credit card is requested to guarantee the reservation. For any help, please, contact: abnp2014@lnl.infn.it.

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

Looking forward to seeing you at Laboratori Nazionali di Legnaro,
The Organizing Committee

International Scientific Committee

M. Cavenago (Chair), *INFN Legnaro, Italy*
R. Edgecock, *Uddersfield University, UK*
A. Lombardi, *CERN, Switzerland*
H. Owen, *Manchester University, UK*

Organizing Committee

M. Cavenago (Chair), *INFN Legnaro, Italy*
J. Esposito, *INFN Legnaro, Italy*
E. Fagotti, *INFN Legnaro, Italy*
T. Kulevoy, *ITEP Moscow, Russia*
A. Pisent, *INFN Legnaro, Italy*

Conference Secretaries

Anna D'Este, *INFN Legnaro, Italy*
Michela Menegolo, *INFN Legnaro, Italy*

Sponsored by:



and



**Accelerator Application Network Activity
Work Package 4**

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CONTACT ADDRESS

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