

Workshop on Accelerator based Neutron Production

April 14th-15th, 2014

Laboratori Nazionali di Legnaro (Padova), Italy

THIRD 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;
- $\circ\,$ 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. The updated programme is available on the <u>Workshop website</u>.

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 <u>conference website</u>.

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 <u>http://www.landomas.it/</u> - Ph. +39 049 8600382; e-mail <u>landomas@landomas.it</u>.

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.



TRANSFER FROM PADOVA HOTELS TO LNL and BACK

Bus transfers have been organized daily between the hotels in Padova and LNL for those participants who have requested this service in the registration form. Since the bus can stop only for a few seconds, participants are kindly recommended to be on time at the pick-up points. If you miss the bus, you can use the regular buses of the SITA company (FSBUSITALIA) directed to "Agripolis" or "Piove di Sacco" or call a taxi (http://www.taxipadova.it/ - ph. 049 – 651333).

In the evening, the buses will return participants to the same points.

PICK-UP POINTS

The pick-up points of the bus "MICHIELOTTO Autoservizi" (remember this name to recognize the bus) will be:

For participants lodging at Hotel Europa: leaving the hotel, turn on the right, cross the road till "Mercedes" shop. In front of the shop there is a bus stop (crossroad with Corso Garibaldi).

For participants lodging at Hotel Donatello: the bus will stop in front of the hotel.

For participants lodging at Hotel Igea: leaving the hotel, go straight about 50 meters till the crossroad with Via Falloppio, turn on the left; the bus will stop at the newsagent's.

PICK-UP TIMES

Monday, April 14

- 8:00 pick-up point of Hotel Europa
- 8:10 pick-up point of Hotel Igea
- 8:20 pick-up point of Hotel Donatello
- 18:45 to Restaurant Baretta
- 22:00 back to hotels

Tuesday, April 15

- 8:00 pick-up point of Hotel Europa
- 8:10 pick-up point of Hotel Igea
- 8:20 pick-up point of Hotel Donatello
- 17:40 back to the hotels

REGISTRATION

Registration has closed on **April 4th, 2014**. For any problem, please contact the Secretariat: <u>abnp2014@lnl.infn.it</u>.

ACCOMMODATION

Please, refer to ABNP 2014 website for information about accommodation. For any help, please, contact: <u>abnp2014@lnl.infn.it</u>.

LUNCHES

Lunches on April 14th and 15th will be served at LNL canteen at the price of 8,13€.

WORKING DINNER

On April 14th, at 19:00, a working dinner will be offered to participants at Restaurant Baretta, Via Roma 33/Via Cavour 1, Legnaro (Padova).

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, *Huddersfield University, UK* A. Lombardi, *CERN, Switzerland* H. Owen, *Manchester University, UK*

Conference Secretaries

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

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*



Sponsored by:



Accelerator Application Network Activity

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