



# UCANS-V

## *The 5<sup>th</sup> International Meeting of Union for Compact Accelerator-driven Neutron Sources*

**May 12<sup>th</sup>-15<sup>th</sup>, 2015**

**Laboratori Nazionali di Legnaro (Padova), Italy**

### **FIRST CIRCULAR**

The “5<sup>th</sup> International Meeting of Union for Compact Accelerator-driven Neutron Sources, UCANS-V” will be held from 12<sup>th</sup> to 15<sup>th</sup> May 2015, at Laboratori Nazionali di Legnaro, Legnaro, ITALY. The programme will begin on Tuesday, May 12<sup>th</sup> pm where the registration will be opened and will close on Friday, May 15<sup>th</sup> pm.

#### **SCOPE OF THE WORKSHOP**

In recent years large scale neutron facilities have been constructed and are now fully in operation. Others are in the final stage of the construction or are planned for the near future. A new generation high current accelerators have opened new perspectives for the development of advanced compact neutron generators/sources with neutron beams tailored to specific activities in various fields of work based on neutrons. These compact sources will play key roles; they can be used for tests of new methods and devices and training.

The activities of compact accelerator-based neutron facilities cover nowadays almost all fields of applied and fundamental science, including materials science, engineering, cancer therapy, radiation damage, nuclear astrophysics, cross section measurements, etc.

Related to the design, construction and operation of these compact neutron facilities, other spinoffs are generated in many ancillary fields, e.g. accelerators, beam optics, neutron production targets, heat removal designs, neutron moderators, neutron transport, neutron detection, electronics, and many others.

The effective impact of compact neutron facilities in modern science and technology is strongly connected to the development of a network based community supported by periodic international meetings and collaborative programs. The UCANS meetings provide valuable opportunities for users and coordinators of compact neutron facilities to exchange information related to various neutron-based and diverse ancillary fields in an informal and friendly setting.

The first UCANS meeting (<http://www.indiana.edu/~lens/UCANS/>), was inaugurated in 2009 at Tsinghua University in Beijing, China, followed by subsequent meetings in the following years in Bloomington, IN., USA; Bilbao, Spain; and Sapporo, Japan. The UCANS-V in 2015 will be hosted by the Laboratori Nazionali di Legnaro (LNL) of the Istituto Nazionale di Fisica Nucleare (INFN). Legnaro is located near Padova and Venice in northern Italy.

## **TOPICS**

- A. Accelerators and beam optics;
- B. Target radiation damage and heat removal;
- C. Moderator neutronics;
- D. Optical devices;
- E. Neutron detection;
- F. Innovative instrumentation;
- G. Material characterization;
- H. Other neutron applications based on CANS;
- I. Nuclear astrophysics;
- J. Nuclear data measurements and evaluation;
- K. Medical applications;
- L. Computer simulations of CANS and instrument performance and data-analysis software.

We also welcome presentations from large facilities, to foster cross-fertilization and joint complementary R&D between compact and large facilities, as well as presentations from developers of small, high current, low energy accelerators. We also encourage friendly discussions on CANS' roles, users' desires, collaborative schemes, education/training, and so on.

## **SCIENTIFIC PROGRAMME**

The scientific programme will consist of invited/contributed and oral/poster presentations focusing on a topic (A-L above). Presenters are invited to submit abstracts before January, 31, 2015. . A template of the abstract can be downloaded from the UCANS-V Meeting website. More details that will be given in the second announcement and reported on the web page of the conference.

## **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 will be available on the incoming [meeting web page \(http://agenda.infn.it/event/UCANS2015\)](http://agenda.infn.it/event/UCANS2015). A bus service between the hotels in Padova and Legnaro will be organized daily for Conference participants.

## **REGISTRATION and ACCOMMODATION**

Details about registration and accommodation in Padova hotels will be soon available on the [meeting web page](#).

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

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### **Program Committee**

John Carpenter, *Argonne National Laboratory, USA*  
Carla Andreani, *University of Rome Tor Vergata, Italy*  
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#### Local Organizing Committee

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J. Wyss, *Cassino University and INFN Padova, Italy*

#### Conference Secretaries

C. Miletta, *INFN Padova, Italy*  
A. D'Este, *INFN Legnaro, Italy*

Organized by



#### **CONTACT ADDRESS**

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