



Training and Education

ETNA's 2017 edition received more than 80 registrations

Registration for the 2017 edition of the School on Advanced Neutron Scattering and Imaging Techniques (ETNA|2017) ended October, 1st. Among a total of 85 registered candidates, the school committee will now select 20 participants. The ETNA|2017 will take place from October 30th to November 10th in Buenos Aires, as a postgraduate course with the institutional endorsement of the Dan Beninson Institute. The school will last two weeks, covering both theoretical and practical classes that will take place at the CNEA headquarters and at Ezeiza and Constituyentes Atomic Centers.



A topical course on neutron scattering and imaging was offered to postgraduate students of Materials Sci. & Tech. at the Sábato Institute

With the participation of twenty regular students from the "Microscopy and Microanalysis" course of postgraduate careers in Materials Science at the Sábato Institute, LAHN team members delivered several lectures on neutron scattering and imaging techniques for the characterization of materials.



Outreach and Public Awareness

A half-day event for communicating the current-state of the LAHN project was held in the Ezeiza and Constituyentes Atomic Centers



With the attendance of around 60 staff members and students from different departments of the CNEA, the LAHN team explained the scope of the project, the use of neutron beams and their specific applications in different scientific areas. The progress of the AS-TOR and ANDES instruments was presented together with the major milestones achieved in the past year. Other topics discussed in the presentation were the project's medium and long-term goals, management strategies, opportunities for professional development, national and international networking and training activities announcements. The events were held on July 10th and 12th at Ezeiza and Constituyentes Atomic Center, respectively.

The presentations are now available online! [Follow this link.](#)

LAHN visited the INGEBI Institute in Buenos Aires

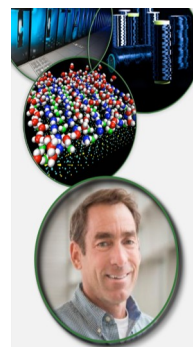
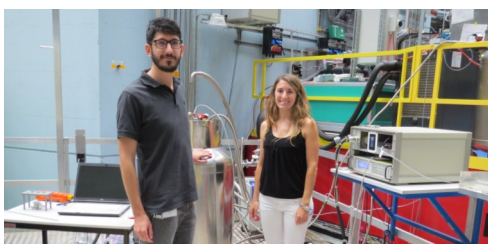
On July 13th we delivered a talk at the Research Institute of Genetic Engineering and Molecular Biology (INGEBI-CONICET) where we shared the fundamentals of neutron scattering and imaging techniques with the community of biologists, as well as their applications in the biosciences.



Networking

Argentine users running experiments at the Paul Scherrer Institute

Three proposals from Argentine users were assigned beamtime at the ZEBRA and HRPT instruments from the SINQ laboratory in PSI, Villigen, Switzerland. Ana Laura Larralde, from Bariloche Atomic Center, as well as Juan Pablo Bolletta and Raúl Carbonio, from the National University of Córdoba performed neutron diffraction experiments on powders and single crystals of novel magnetic compounds.



Dr. Michael Fitzsimmons
Oak Ridge National Laboratory
University of Tennessee

CURSO DE POSGRADO NEUTRON SCATTERING IN NANOSCIENCE

14 al 21 de AGOSTO

Instituto Balseiro

22 al 25 de AGOSTO

Centro Atómico Constituyentes

Large-scale structures
Small angle neutron scattering
Reflectometry
Application to inorganic, metallic and polymer structures
Thin films and engineering materials
Magnetic and multiferroic nanostructures
Course will include software practicals involving X-ray and neutron scattering.

ORGANIZAN



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A new video is online with interviews to the members of the Advisory Panel of the LAHN instruments. Click on the photo to see it.





News from RA-10

Progress of the RA-10 civil work (July 2017)

- The future staff of operators currently under training for occupying level I and II positions, completed their professional practices in the facilities of the RA-6 reactor (CAB) and will start practices at the RA-3 reactor (CAE) in August.
- The structural framework for the cement floor of level -6mts of the reactor building has been installed.



Instrument development

Mechanical design ideas for the ANDES diffractometer were discussed in Bariloche

On June 27th and 28th, a technical meeting was held at Bariloche Atomic Center, where the recent advances in the mechanical design of the components of the ANDES diffractometer were presented. In this opportunity, different ideas were discussed for various components of the instrument, such as the polychromatic beam conditioners, the monochromator drum, the framework for the polychromatic beam components, the system for collimation exchange and the rotating shielding system. The best design solutions were selected for further improvement and the following challenges were outlined by the team.



Calls and Job Offers

Four postdoctoral positions in development and application of novel neutron imaging methods

The Nuclear Physics Institute of the Czech Academy of Sciences (NPI) in Prague, Czech Republic, in collaboration with the European Spallation Source (ESS, Sweden), Technical University of Denmark (DTU) and the Paul Scherrer Institut (PSI, Switzerland) invites for applications to fill [four postdoctoral positions](#). The positions are focused developing and applying new diffraction based imaging methodologies for 3D reconstruction of microstructure in engineering materials. The positions are for two years and can be extended up to four years. The starting date should be as soon as possible after September 1st, 2017 and is negotiable. [Read more...](#)

[Postdoc position - Diffraction group - ILL \(France\)](#)

The ILL Diffraction group operates a large suite of powder and single crystal diffractometers to carry out collaborative research programs in various areas of chemistry, physics, materials science, engineering, and protein structure. We are looking for highly motivated candidates to work on the development of crystallographic algorithms to develop the 'Crystallographic Fortran Modules Library' (CrysFML) and FullProf Suite's programs.

[Post-Doctoral Research Assistant - Ionic Liquids - ILL \(France\)](#)

Working within the Spectroscopy group and funded by the European grant FILL2030, you will be in charge of boosting the development of methods for studying the dynamics and structural properties of ionic liquids (ILs) using (in particular) neutrons, and of fostering links with external groups working in fields such as diffraction and small-angle neutron scattering.

[Post-Doc position on PANDA cold three axis neutron spectrometer - FRM-II Germany](#)

We are looking for an engaged PostDoc on the cold three-axis spectrometer PANDA at MLZ Garching, Germany. The position includes the responsibilities as a co-responsible instrument scientist as well as the possibility to develop an own scientific profile in the fields of magnetism, superconductivity, strongly correlated electron systems, or frustrated magnets. The candidate should be willing to cooperate within the team on instrument development and user service, and should be able to work independently on own projects. For the starting period, overlap with the current co-responsible will be provided.

UPCOMING CALLS FOR PROPOSALS

- Canadian Neutron Beam Centre: Permanent call [More info](#)
- HZB: BESSY II and BER II: September 1st, 2017, 23:59 (CET). [More info](#)
- ILL: 14 September 2017, midnight (EU time). [More info](#)



Upcoming events

[PSI Master School 2017](#)—September 4-15, 2017, Villigen, Switzerland

[21st Laboratory Course Neutron Scattering](#)—September 4-15, 2017, Jülich and Garching/Munich, Germany

[EMBO Practical Course: Small angle neutron and X-ray scattering from proteins in solution](#)— September 11-15, 2017, Grenoble, France

[XNPIG2017: 4th International conference on X-ray and Neutron Phase Imaging with Gratings](#) — September 12-15, 2017, Villigen, Switzerland

[International School on Fundamental Crystallography and Electron Crystallography](#) - October 8-13, 2017, Sofia, Bulgaria.

[CMR at IBR-2: Condensed Matter Research at the IBR-2](#) October 9-12, 2017, Dubna, Russia.

[JCNS Workshop 2017: Trends and Perspectives in Neutron Instrumentation. Probing Structure and Dynamics at Interfaces and Surfaces](#) October 10-13, 2017, Tübingen, Germany

[NINMACH 2017: 2nd Neutron Imaging and Neutron Methods in Archaeology and Cultural Heritage conference](#) October 11-13, 2017, Budapest, Hungary

[2017 - Annual School on Neutron Diffraction data Treatment using the FullProf Suite](#) October 16-20, 2017, ILL Grenoble, France

[GeCats Infoday "Synchrotron Radiation and Neutrons for Catalysis, Materials Research and Development"](#) October 23, 2017, Frankfurt a. M., Germany

[Neutrons Matter VII](#) November 7-8, 2017, Rome, Italy

[Macromolecular Crystallography School 2017](#) November 13-23, 2017, Montevideo, Uruguay

[The 9th AONSA/The 2nd Neutron and Muon School](#) November 16-20, 2017, Tokai, Japan