

## **“Neutrons for Chemistry and Materials Science Applications”**

*Directors of the V Course : Prof. Paul Henry (ISIS) and Dr. Timmy Ramirez (ORNL)*

4<sup>th</sup> July – 13<sup>th</sup> July 2018, Erice (Italy)

**Application deadline: 4<sup>th</sup> June**



Application is now open for **“Neutrons for Chemistry and Materials Science Applications”** – the V<sup>th</sup> course within the Erice School “Neutron Science and Instrumentation” and the XVII School of Neutron Scattering (SoNS) “Francesco Paolo Ricci”.

**Application deadline: 4<sup>th</sup> June 2018.**

We encourage early application as the school is normally highly oversubscribed and late submissions are not accepted. The 2018 course focusses on the relationship between the design and operation of instruments, sample environment and software, concentrating on those relevant towards chemistry and materials science applications. It provides a coherent set of introductory lectures on design, construction and implementation of instrumentation, sample environment and software to address the scientific requirements of the user community. Foundation lectures on the application of structural analysis, using average and local structure methodology, and dynamics, using experimental data analysis techniques and theoretical modelling, will introduce participants to the rapidly growing “combined approach” available to the neutron scattering community today and the requirements they impose on all forms of instrumentation.

With a target audience of 25-30 students, the school intends to promote collaboration in instrumentation design, including

sample environments, and successful implementation of reliable software for current and next generation large-scale neutron facilities. It will provide a broad overview of the field, including the most recent ideas and advances in instrumentation, modelling and experimental capabilities, as well as critical discussions of the development issues involved. Evening lectures will highlight the historical role of neutron scattering techniques. By gathering participants with different backgrounds, the course encourages cross-fertilization of ideas necessary for the continued success of large-scale facilities.

The Course will consist of lectures and specialised seminars directed towards graduate students, postdoctoral researchers and junior scientists working at universities and/or large-scale facilities. Participants will be selected for the school based on their need to develop instrumentation (including sample environment and software) in their present and/or future research activities.

For registration, please send a ‘personal statement’ and a ‘statement from your supervisor’ to **Paul Henry** and **Timmy Ramirez** as well as a copy to the **school secretariat**. Please register using the **school website**.

Accommodation and Lectures are at the **Ettore Majorana Foundation (EMFCSC)**.

