## 2<sup>nd</sup> ICTP-INFM Spring School on

## "MAGNETIC PROPERTIES OF CONDENSED MATTER INVESTIGATED BY NEUTRON SCATTERING AND SYNCHROTRON RADIATION"

19-28 MAY 2003

**Abdus Salam ICTP, Miramare, Trieste, Italy** 

The Istituto Nazionale per la Fisica della Materia (INFM) and the Abdus Salam International Centre for Theoretical Physics (ICTP) are organizing a School on Investigation of the Magnetic Properties of Condensed Matter by Neutron Scattering and Synchrotron Radiation Techniques. The Directors are 0. Moze (INFM, University of Modena and Reggio Emilia) and G. Rossi (INFM, University of Modena and Reggio Emilia and INFM-TASC, Trieste).

The techniques of Neutron and Photon Magnetic Scattering provide extremely detailed information on the underlying fundamental physical mechanisms which are responsible for the properties of modern magnetic materials. The purpose of the School is twofold. Firstly, to expose people already carrying out research in magnetism (or those acquiring an interest in magnetism) to the basic theoretical and experimental principles of the two techniques. As a direct consequence, this should lead to an increase in the number of users of neutrons and photons at central facilities. The structure and style of the School will follow very closely that of the highly successful 1 st Joint ICTP-INFM School on the Magnetic Properties of Condensed Matter Investigated by Neutron Scattering and the Synchrotron Radiation Techniques, held at the ICTP in February 2000.

Leading authorities in magnetism/neutron/synchrotron radiation research will lecture at the School on the basic principles and recent developments in both fields. The lectures are intended for young researchers and graduate students. An extremely important aspect will be problem classes, where students will be tested on their knowledge and comprehension of concepts introduced in the lectures.

Scientists and students from all countries that are members of the UN, UNESCO or IAEA may attend the School. As it will be conduced in English, participants should have an adequate working knowledge of this language. Although the main purpose of the Centre is to help researchers from developing countries through a programme of training activities within a framework of international co-operation, scientists from developed countries are also strongly encouraged to apply.

Every effort should be made by candidates to secure financial support, especially for their fare (or at least half-fare) from their home country. Limited funds are available for some applicants from developing countries, to be selected by the organizers. Such financial support is intended only for those who are not more than 45 years' old and who agree to attend the entire activity. There is no registration fee for attending the School.

The **Application Form** form is obtainable via the WWW server which will be constantly updated: <a href="http://agenda.ictp.trieste.it/smr.php?1502">http://agenda.ictp.trieste.it/smr.php?1502</a>, or from the activity secretary. It should be completed and returned <a href="before 15 FEBRUARY 2003">before 15 FEBRUARY 2003</a>, to:

SMR 1502 c/o Ms. Patrizia Passarella the Abdus Salam ICTP Strada Costiera 11, 34014 Trieste, Italy

or

smr1502@ictp.trieste.it (please save and send file attachments in RTF format)

Any attachment to the request for participation form, relevant to extra information for selection purposes, should not exceed 6 pages.

Ph: +39-040-2240231 Fax: +39-040-2240304 Email: passarel@ictp.trieste.it ICTP Home Page: http://www.ictp.trieste.it./

## **CO-SPONSORED BY:**

I.N.F.M.

(Istituto Nazionale per la Fisica della Materia)

## **TENTATIVE PROGRAMME:**

**A. FURRER** (*PSI*, *Villigen*, *Switzerland*)
Principles and Applications of Magneti Neutron Scattering

**F. TASSET** (*ILL, Grenoble, France*) Polarized Neutron Scattering

**S. LANGRIDGE** (ISIS, Didcot, UK) Neutron Reflectivity and Magnetic Order i Multilayers and Interfaces

C. PETRILLO (INFM, Politecnico di Milanc Italy)

Magnetic Form Factors, Measurements an Modelling

R. CACIUFFO (INFM, Università di Ancona Italy)

Magnetic Excitations in Molecular Magnets

**A. WEIDENMANN** (BENSC, HMI, Germany) Polarized Small Angle Scattering fror Magnetic Nanocrystals

**P. CARRA** (ESRF, Grenoble, France)
Basics of the Theory of Magnetic Photo
Scattering

**C. VETTIER** (*ILL, Grenoble, France*) Magnetic Photon Scattering Experiments

**T. BRUECKEL** (FZ, Juelich, Germany)
Applications of Non-resonant Magneti
Photon Diffraction

**D. MCMORROW** (Risoe, Denmark)
Element Specific Magnetism Investigated by
Resonant X-Ray Magnetic Scattering

W. STIRLING (ESRF, Grenoble, France)
The Complementarity between Neutron and Photon Magnetic Scattering

**APPLICATION DEADLINE** 

**15 FEBRUARY 2003**