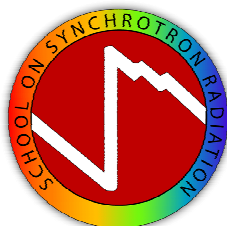




XI School on Synchrotron Radiation: Fundamentals, Methods and Applications

Duino (Trieste - Italy) 5 – 16 September 2011

FIRST CIRCULAR



DIRECTORS

Prof. Settimio MOBILIO

Department of Physics
University Roma TRE
Via della Vasca Navale 84
00046 Roma
Italy

Tel. +39 06 57336451
Fax +39 06 57336450
E-Mail: Mobilio@fis.uniroma3.it

Prof. Gilberto VLAIC

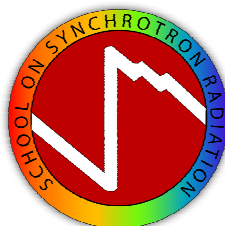
Sincrotrone Trieste S.C.p.A.
Strada Statale 14 - km 163,5
AREA Science Park
34149 Basovizza, Trieste
Italy

and

Tel. +39 040 3758030
Fax +39 040 3758565
E-Mail: vlaic@elettra.trieste.it

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Aims of the School

The Italian Society of Synchrotron Radiation (SILS) in collaboration with the “Sincrotrone Trieste” SCpA organizes in September 2011 the XI edition of the School

“Synchrotron Radiation: Fundamentals, Methods and Applications”

The first seven editions of the School were organized by SILS at S. Margherita di Pula in Sardinia, the VIII at the Frascati Laboratory of the INFN and the last two editions at Duino.

The present edition will again be held at Duino, in the nearby of Trieste (Italy), where the III generation synchrotron Italian radiation facility ELETTRA is operative since fifteen years.

The School will give a general overview of the characteristics and potentiality of Synchrotron Radiation to graduated students and young researchers interested in its use. The emission of Synchrotron Radiation both from the storage rings and from free electron lasers, its properties, most of the experimental methods used, their fundamentals and applications in Physics, Chemistry, Biology, Earth Science, Material Science and Medicine will be illustrated.

Data analysis sessions as well as experimental training on some of the ELETTRA beam-lines are also foreseen.

The lecturers will be well known scientists with long standing experience on the use of synchrotron radiation in each specific topic; the lectures will be given in English. The main topics will be:

- Production and properties of Synchrotron Radiation;
- Free electron laser;
- Basic of the interaction between matter and radiation;
- X-Ray Absorption Spectroscopy (EXAFS and XANES)
- X-ray Diffraction (single crystal, powder, anomalous scattering)
- Small angle scattering;
- X-ray Microscopy and micro-spectroscopy;
- Photoemission (from valence and from core levels; angular, time and spin resolved);
- IR spectroscopy and microscopy;
- Resonant spectroscopy and diffraction techniques;
- Dichroism;
- Inelastic X-ray scattering;
- Applications to bio-molecules, magnetism, catalysts, surfaces, environment, cultural heritage.

Participants are encouraged to present a poster on their research activity and interest toward synchrotron radiation, in order to facilitate exchange of ideas and collaborations among participants.

The detailed programme of the lectures will be sent to participants together with notification of the acceptance to the school. The programme of the previous edition can be found at the WEB site <http://www.elettra.trieste.it/Events/2009/XSILS/index.php?n=Main.Program>

Applications

Participants will be limited to 50. To participate the application form shall be send to the secretary within next May the 31st. The selection of the participants will be based on the time of the arrival of applications. The fee is fixed to 250,00 euro; it includes the attendance to the lectures, a copy of the lecture notes, the participation to the social excursion, transportation to ELETTRA. for the practical sessions.

Deadlines

Application forms shall be received within 31/05/2011, through the WEB site of the School (<http://www.elettra.trieste.it>), that will be available soon. A link will be found also on the WEB site of the SILS (www.fis.uniroma3.it/sils).

Participants shall be informed on the acceptance of their application by E.mail within 30/6/2011.

Registration fee shall be paid within 20/7/2009.

Accommodation at Idea Hotel Trieste Duino Hotel shall be confirmed to the secretary within 20/7/2011.

"Carla Cauletti" Fellowships

As in the previous editions, the SILS will grant some fellowships to facilitate participation to the School. Fellowships are entitled to Carla Cauletti, an Italian chemist pioneer in the use of synchrotron radiation. Fellowship will cover the registration fee and, in exceptional cases, partly the accommodation.

Site of the School

Lectures will be given at the Duino Castle, 34013 Duino Aurisina (Trieste, Italy). Visit the site <http://www.castellodiduino.it/> for more information.

Hotel Accommodation

On request the secretary will arrange accommodation for participants at the Idea Hotel Trieste Duino, via Duino 78 34013 Duino (Trieste) (tel. +39-040208273), which is in the nearby of the Duino Castle.

The participants of the School will have a special fare of 35,00 euro/person/night in double room, 60,00 euro/night in single room, breakfast included.

Participants shall pay the Hotel themselves.

Hotel accommodation at the Idea Hotel Trieste Duino shall be requested at the application time; accepted students shall confirm the accommodation to the secretary within 20/7/2011.

Contacts

For additional information, please contact the Secretary by E.mail (XIsils@elettra.trieste.it)

Useful information

During September the weather in Trieste is generally sunny, with a mean temperature between 17 and 23 degrees.