INTERNATIONAL SCHOOL OF CRYSTALLOGRAPHY

43rd Course: ELECTRON CRYSTALLOGRAPHY:
NEW METHODS TO EXPLORE STRUCTURE AND PROPERTIES OF THE NANO WORLD

ERICE-SICILY: 2 - 12 JUNE 2011

Sponsored by: • International Union of Crystallography
• Italian Ministry of Education, University and Scientific Research • Sicilian Regional Government

PROGRAMME AND LECTURERS

Phase problem and different approaches for structure solution
Image formation in the electron microscope
Precission electron diffraction and rotation method
Automated diffraction tomography
Convergent beam electron diffraction
High quality diffraction data - instrumentation and methods
Ab initio structure solution (direct methods, maximum entropy, charge flipping)
Combination of X-ray powder diffraction, electron diffraction and HRTEM data for structure solution
Diffusive electron imaging
Dark field electron holography
Electron diffraction of 3D protein crystals
Commensurate and incommensurate superstructures via electron diffraction

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POETIC TOUCH

According to legend, Erice, son of Venus and Neptune, founded a small town on top of a mountain (750 metres above sea level) more than three thousand years ago. The founder of modern history — i.e. the recording of events in a methodic and chronological sequence as they really happened without reference to mythical causes — was great Thucydides (~460 B.C.), writing about events connected with the conquest of Troy (1183 B.C.) said: “After the fall of Troy some Trojans on their escape from the Achaei arrived in Sicily by boat and as they settled near the border with the Sicanians all together they were named Elymi: their towns were Segesta and Erice.”

This inspired Virgil to describe the arrival of the Trojan royal family on the island and a wild and rocky coast around Monte Cofano: all at less than one hour’s drive from Erice.

In Erice you can admire the Castle of Venus, the Cyclopean Walls (~800 B.C.) and the Gothic Cathedral (~1300 A.D.). Erice is at present a mixture of ancient and medieval architecture. Other masterpieces of ancient civilization are to be found in the neighbourhood: at Motya (Phoenician), Segesta (Elymian), and Selinunte (Greek). On the Aegadian Islands — theatre of the decisive naval battle of the first Punic War (~240 B.C.) — and a wild and rocky coast around Monte Cofano: all at less than one hour’s drive from Erice.

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More information about the International School of Crystallography can be found on the WWW at the following address: http://www.crystalderg.org

• PLEASE NOTE: Participants must arrive in Erice on June 2, 2011, not later than 8 p.m.

More information about the «Ettore Majorana» Foundation and Centre for Scientific Culture can be found on the WWW at the following address: http://www.cecem.infn.it

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