



«ETTORE MAJORANA» FOUNDATION AND CENTRE FOR SCIENTIFIC CULTURE
TO PAY A PERMANENT TRIBUTE TO GALILEO GALILEI, FOUNDER OF MODERN SCIENCE
AND TO ENRICO FERMI, THE "ITALIAN NAVIGATOR", FATHER OF THE WEAK FORCES



INTERNATIONAL SCHOOL OF SOLID STATE PHYSICS

49th Course: *EPIOPTICS-11*

ERICE-SICILY: 19 – 25 JULY 2010

Sponsored by the: • Italian Ministry of University and Research • Sicilian Regional Government

PROGRAMME AND LECTURERS

LINEAR OPTICS

- R. DEL SOLE, University of Rome Tor Vergata, IT
- O. PULCI, University of Rome Tor Vergata, IT
- Y. BORENSZTEIN, Université Pierre et Marie Curie, Paris, FR
- A. RUBIO, Universidad del País Vasco, San Sebastian, ES

NONLINEAR OPTICS

- J. McGILP, Trinity College, Dublin, IE
- N. DOWNER, College of Natural Sciences, Austin, TX, US
- C. NOGUEZ, UNAM, MX

FAST PROCESSES

- T. HEINZ, Columbia University, New York, NY, US
- N. TOLK, Vanderbilt University, Nashville, TN, US

RAS, RAMAN AND NANOPHOTONICS

- D.S. MARTIN, University of Liverpool, UK
- W. RICHTER, Institut für Festkörperphysik, Berlin, DE
- A. MEIXNER, University of Tuebingen, DE
- E. HU, University of California, Berkeley, CA, US
- K. ELTSOV, Prokhorov General Physics Institute RAS, Moscow, RU

MAGNETO-OPTICAL STUDIES

- Th. RASING, University of Nijmegen, NL
- B. MENDOZA, Centro de Investigaciones en Optica, Leon, MX

INSTRUMENTATION: FROM IR-FEL TO X-FEL

- G. MARGARITONDO, Swiss Federal Institute of Technology, Lausanne, CH
- A. CRICENTI, ISM-CNR, Rome, IT
- P. WEIGHTMAN, University of Liverpool, UK

PURPOSE OF THE COURSE

The School will bring together researchers from universities and research institutes who work in the fields of (semiconductor) surface science, epitaxial growth, materials deposition and optical diagnostics relevant to (semiconductor) materials and structures of interest for present and anticipated (spin) electronic devices. The school is aimed at assessing the capabilities of state-of-the-art optical techniques in elucidating the fundamental electronic and structural properties of semiconductor and metal surfaces, interfaces, thin layers, and layer structures, and assessing the usefulness of these techniques for optimization of high quality multilayer samples through feedback control during materials growth and processing. Materials of particular interest are silicon, semiconductor-metal interfaces, semiconductor and magnetic multilayers and III-V compound semiconductors.

APPLICATIONS

Persons wishing to attend the School should send an application, preferably by fax or electronic mail, to the Co-Director of the Course:

- Dr. Antonio CRICENTI
Istituto di Struttura della Materia
Consiglio Nazionale delle Ricerche
Via Fosso del Cavaliere, 100 - 00133 ROMA, Italy
Tel +39.06.49934143 - Fax +39.06.4994153
e-mail: school@ism.cnr.it - cricenti@ism.cnr.it

specifying:

- i) date and place of birth;
- ii) nationality;
- iii) present position;
- iv) their specific interest in the School;
- v) an abstract, if they wish to give a contribution (oral or poster).

Students should include a short C.V. in addition to a letter of recommendation from the head of their research group or from a senior scientist active in the field.

PLEASE NOTE

Participants must arrive on 19 July, not later than 7 pm.

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 — the great Thucydides (~500 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 Sicilians all together they were named Elymi: their towns were Segesta and Erice.» This inspired Virgil to describe the arrival of the Trojan royal family in Erice and the burial of Anchises, by his son Aeneas, on the coast below Erice. Homer (~1000 B.C.), Theocritus (~300 B.C.), Polybius (~200 B.C.), Virgil (~50 B.C.), Horace (~20 B.C.), and others have celebrated this magnificent spot in Sicily in their poems. During seven centuries (XIII-XIX) the town of Erice was under the leadership of a local oligarchy, whose wisdom assured a long period of cultural development and economic prosperity which in turn gave rise to the many churches, monasteries and private palaces which you see today.

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 (264-241 B.C.) — suggestive neolithic and paleolithic vestiges are still visible: the grottoes of Favignana, the carvings and murals of Levanzo.

Splendid beaches are to be found at San Vito Lo Capo, Scopello, and Cornino, and a wild and rocky coast around Monte Cofano: all at less than one hour's drive from Erice.

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

Closing Date for Applications: 5 April 2010