



INTERNATIONAL SCHOOL OF QUANTUM ELECTRONICS

44th Course: ADVANCES ON NANOPHOTONICS II

ERICE-SICILY: 22 JUNE - 2 JULY 2007

Sponsored by: • Italian Ministry of Education, University and Scientific Research • Sicilian Regional Government
NoE Phoremest • CNR • University "La Sapienza" and University "Tor Vergata"

TOPICS AND LECTURERS

Hybrid resonant organic-inorganic nanostructures for optoelectronics

- V. AGRANOVICH, University of Texas, Dallas, USA
and Institute of Spectroscopy, Russian Academy of Science, Moscow, RU

Nonlinear Optics in Nanostructures

- M. BERTOLOTTI, Università La Sapienza, Roma, I

Single Molecule photonics

- S. BRASSELET, Ecole Normale Supérieure de Cachan, F

Optical studies of entanglement and transport of matter/light waves

- A. BUCHLEITNER, Max Planck Institute for the Physics of Complex Systems, Dresden, D

Optical Properties of Semiconductor-Metal Nanoparticle Molecules: Hybrid Excitons and the Nonlinear Fano Effect

- A. GOVOROV, Ohio University, Athens, USA

Methods of characterizations

- G. HUBLER, Naval Research Laboratory, Washington DC, USA

Nanoscale Imaging

- K. KUIPERS, Center for Nanophotonics, FOM-Institute AMOLF, Amsterdam, NL

Optical metamaterials and nanophotonic devices

- E. OZBAY, Bilkent University, Ankara, TR

Lasings and optical properties of liquid crystals

- P. PALLFY-MUHORAY, Liquid Crystal Institute, Kent State University, Kent, USA

Nonlinear photonic crystals

- R. RAJ, Laboratoire de Photonique et de Nanostructures, Marcoussis, F

Transport theory and optical properties of complex structures

- J.J. SAENZ, Universidad Autónoma de Madrid, E

Pulse propagation in metamaterials

- M. SCALORA, US Redstone Arsenal, Huntsville, AL, USA

Nanoplasmonics

- M. STOCKMAN Georgia State University, Atlanta, USA

Anderson localization of light and transport of ultrasound

- B. VAN TIGGELEN, CNRS Université Joseph Fourier, Grenoble, F

Photonics crystals and Silicon based photonics

- Y. VLASOV, IBM TJ Watson Research Center, Yorktown Heights, NY, USA

Photonic quasi crystals and synthesis of photonic structures

- G. VON FREYMAN, Institut für Nanotechnologie, Forschungszentrum Karlsruhe, D

Nanoscale characterization

- O. WRIGHT Hokkaido University, Sapporo, J

Molecular photonics

- J. ZYSS Ecole Normale Supérieure de Cachan, F

PURPOSE OF THE COURSE

There has been an increasing interest, in recent years, in nanophotonics. Nanophotonics is a very broad field, having fascinating aspects both from a fundamental point of view and with regard to future applications in photonic devices and materials. The scope of the school is to introduce participants to concept, methods, applications and the state of the art in nanophotonics. The school will focus on both the theoretical and experimental aspects of the current research in this field, with an eye to applications.

APPLICATIONS

Persons wishing to attend the Course should apply in writing to:

Professor Concita SIBILIA
Università di Roma "La Sapienza"
Dipartimento di Energetica
Via Scarpa, 16, ROMA, Italia
Tel + 39.06.49916541 – Fax + 39.06.44240183
e-mail: concita.sibilia@uniroma1.it

specifying:

Full name, address, age, and nationality;
academic qualification, present position and affiliation;
their specific interest in the workshop.

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 should arrive in Erice on June 22 not later than 5 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 methodical 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 Anchise, by his son Enea, 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.infna.it>