



«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 QUANTUM ELECTRONICS

47th Course *ADVANCES ON NANOPHOTONICS III: Plasmonics and Energy Efficiency*

ERICE-SICILY: JULY 11-18 - 2010

Sponsored by: • Italian Ministry of Education, University and Scientific Research • Sicilian Regional Government
SIOF • EU Network of Excellence Nanophotonics4energy ,COST MP0702, EOS



PURPOSE OF THE WORKSHOP

Nanophotonics is a broad field, having fascinating aspects both from a fundamental point of view and with regard to future applications in photonic devices and materials. The topics that will be covered by the school are those of nano plasmonics and nano photonics including energy efficiency and generation. 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 the field, with an eye to applications. The School will be covered by lectures and seminars. A special event, supported by SIOF, to celebrate 50 years of Laser is scheduled .

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:

- i) full name, address, age, nationality;
- ii) academic qualification, present position and affiliation;
- iii) their specific interest in the summer school.

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.

Application deadline : June 15, 2010
<http://w3.uniroma1.it/nanophotonic>

POETIC TOUCH

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.

DIRECTORS OF THE COURSE: C. SIBILIA - D.S. WIERSMA - M. BERTOLOTTI- C.M. SOTOMAYOR TORRES
DIRECTOR OF THE SCHOOL: S. MARTELLUCCI - A.N. CHESTER
EMFCS PRESIDENT AND DIRECTOR OF THE CENTRE: A. ZICHICHI

Lectures

Converting Photons to Energy

P. Lagoudakis – University of Southampton – UK

Plasmonic Applications to Photovoltaic

A.Polman – FOM-institute Amolf – NL

Solar Photophysics

V. Klimov – Los Alamos National Laboratory – USA

Tuning the solar spectrum :how to maximize PV cell efficiency

R. Fusco – ENI

Introduction to Quantum Information

F.A.Bovino-Elsag Datamat

Quantum Plasmonics

M. Lukin-Harward -USA

Nonlinear Optics with Metals

M. Kauranen – Tampere University of Technology – FI

Plasmon Emitters

N. Van Hults – ICFO – ES

Nonlinear Plasmonics

A. Zayats – The Queen's University of Belfast – UK

Introduction to Q-dots

A.Passaseo – CNR-NNL – I

Nonlinear photonic crystals

F.Raineri Lab. de Photonique et de Nanostructures – Marcoussis – F

Nanophotonics application to bio

I.Rendina – CNR-IMM – I

Progress in Metamaterials

L. Solymar – University of Oxford – UK

Seminars

Nanoscale Thermal Transport

O. Wrighth – Hokkaido University – Japan

Si and plasmon waveguides for integrated nano-photonics

Bozena Jaskorzynska-Royal Institute of Technology (KTH)-S

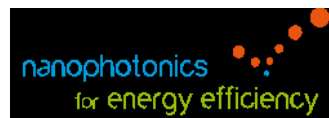
50 Years of Laser

Some hystorical remembering

M.Bertolotti-Univ. di Roma La Sapienza- Roma-I

Pushing the laser to extreme: prospective of short wavelength FEL

L.Palumbo- INFN- I



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.infn.it>