



«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 ON COMPLEXITY

*14th Course:*

## *NONLINEAR OPTICS AND COMPLEXITY IN PHOTONIC CRYSTAL FIBERS AND NANOSTRUCTURES*

ERICE-SICILY: 8 – 13 NOVEMBER 2011

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

### TOPICS AND LECTURERS

*Photonic Crystals and Photonic Crystal Fibers*

*Metamaterials and transformation optics*

*Pattern formation and solitons*

*Quantum optics in fibers*

*Optical tweezers*

*Plasmonics*

- K. BUSCH, University of Karlsruhe, DE
- E. DEL RE, University of Aquila, IT
- A. GAETA, Cornell University, Ithaca, US
- O. HESS, Imperial College, London, UK

- P. KAZANSKY, University of Southampton, UK
- U. LEONHARDT, University of St. Andrews, UK
- G. LEUCHS, MPI for the Science of Light, Erlangen, DE
- C. LÓPEZ, Instituto de Ciencia de Materiales, CSIC Madrid, ES
- M. PADGETT, University of Glasgow, UK
- U. PESCHEL, University of Erlangen, DE
- A. PICOZZI, Université de Bourgogne, Dijon, FR
- K. SAITOH, Hokkaido University, JP
- M.I. STOCKMAN, Georgia State University, Atlanta, US
- S. TRILLO, University of Ferrara, IT
- S. WABNITZ, University of Brescia, IT

#### PURPOSE OF THE COURSE

This Workshop will be held at the Ettore Majorana Foundation and Centre for Scientific Culture in Erice, Sicily (Italy), November 8-13, 2011. Our aim is to establish a premier international forum for leaders in the fields of non-linear optics, supercontinuum generation, solitons, quantum optics and wider applications of photonic crystal fibers and nanostructures.

For more information:

<http://www.mpl.mpg.de/mpf/php/abteilung3/jrg/erice2011/>

#### APPLICATIONS

Persons wishing to attend the Course can be sent the applications to the follow e-mail address:

[ericeworkshop2011@gmail.com](mailto:ericeworkshop2011@gmail.com)

#### PLEASE NOTE

Participants must arrive on November 8, not later than 7 pm.

**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>

#### 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 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.