



«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 NUCLEAR PHYSICS

29th Course: *QUARKS IN HADRONS AND NUCLEI*

ERICE–SICILY: 16 – 24 SEPTEMBER 2007

Sponsored by the: • **Deutsche Forschungsgemeinschaft** • **European Physical Society**
• Italian Ministry of Education, University and Scientific Research • Sicilian Regional Government

TOPICS AND LECTURERS

Recent results from GRAAL

- A. D'ANGELO, University of Rome, I

Nucleon resonances

- R. BECK, Universität Bonn, D

Strangeness in nucleons

- E.J. BEISE, University of Maryland, College Park, MD, USA

Baryon structure in a quark-confining non-local NJL model

- M. BIRSE, University of Manchester, UK

Generalized parton distributions in nucleons and nuclei

- K. GOEKE, Universität Bochum, D

Deeply virtual compton scattering off the nucleon

- M. GUIDAL, Université de Orsay, F

Lattice QCD and hadron structure

- C.B. LANG, Universität Graz, A

Photo- and electron-production of mesons on nucleons and nuclei

- E. OSET, Universidad de Valencia, ES

Hadron properties from Dyson-Schwinger QCD

- C. ROBERTS, ANL, Argonne, IL, USA

Photo- and electron-production of mesons on the nucleon

- G. ROSNER, University of Glasgow, UK

Quark models

- A. THOMAS, CEBAF, Newport News, VA, USA

Chiral extrapolations for static properties of the nucleon

- W. WEISE, Technische Universität München, D

PURPOSE OF THE COURSE

Quantum Chromo-Dynamics (QCD) is generally accepted as the fundamental theory for the structure of hadrons and their strong interactions. The School/Workshop on Nuclear Physics 2007 focuses on experimental and theoretical studies of hadron properties and their interactions at energies below a few GeV.

In this energy domain, it is impossible to use perturbation theory to calculate different processes in QCD since the running coupling constant is large ('strong QCD').

The principal research goal is to identify the relevant degrees of freedom and to map out the transition from a non-perturbative to a perturbative description of the observed strong interaction phenomena.

Participants will have the opportunity to speak about their work.

APPLICATIONS

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

- Professor Amand FAESSLER
Universität Tuebingen
Auf der Morgenstelle 14
D-72076 TUEBINGEN, Germany
Tel +49.7071.2976370 – Fax +49.7071.295388
e-mail: erice2007@uni-tuebingen.de

They should specify:

- date and place of birth together with present nationality;
- degree and other academic qualifications;
- present position and place of work.
- postal and e-mail address.

PLEASE NOTE

Participants must arrive in Erice on 16 September, 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 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.

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