



«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

34th Course: *PROBING THE EXTREMES OF MATTER WITH HEAVY IONS*

ERICE-SICILY: 16 – 24 SEPTEMBER 2012

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

TOPICS AND LECTURERS

Color Glass Condensate and the implications for the LHC

• J. ALBACETE, CEA/Saclay, Gif-sur-Yvette, FR

New results from ALICE I

• P. BRAUN-MUNZINGER, GSI, Darmstadt, DE

Penetrating probes for heavy-ion collisions

• T. HEMMICK, SUNY, Stony Brook, NY, US

Hydrodynamic description of ultrarelativistic heavy-ion collisions

• T. HIRANO, University of Tokyo, JP

Gluon saturation, geometric scaling and color glass condensates in heavy-ion collisions

• K. ITAKURA, KEK, Tsukuba, JP

Recent results from PHENIX

• B. JACAK, Stony Brook, NY, US

Dileptons and photons in heavy-ion collisions

• R. RAPP, College Station, Texas AM University, TX, US

Sound propagation in the quark-gluon plasma

• E. SHURYAK, SUNY, Stony Brook, NY, US

The planned NICA facility in Dubna

• A. SORIN, Joint Institute for Nuclear Research, Dubna, RU

Collective flow at the LHC

• R. SNELLINGS, Utrecht University, NL

New results from ALICE II

• J. STACHEL, University of Heidelberg, DE

Recent results from the HADES experiment

• J. STROTH, University of Frankfurt, DE

The equation of state in weak coupling

• A. VUORINEN, University of Bielefeld, DE

Quarkonia production in heavy-ion collisions

• P. ZHUANG, Tsinghua University, Beijing, CH

PURPOSE OF THE COURSE

The program concentrates on the following topics: The QCD phase diagram; Hydrodynamic evolution of the fireball; Transport properties of strong-interaction matter; RHIC low-energy scan; Results from ALICE; Initial conditions at LHC energies; Quarkonia production at the highest beam energies; Electromagnetic signals; Fluctuations and criticality; Particle interferometry in pp and AA collisions; Heavy-ion collisions at high baryon densities.

APPLICATIONS

Persons wishing to attend the Course should register online at:

<http://www.physik.tu-darmstadt.de/erice/> – <http://www.uni-tuebingen.de/erice/>
or apply in writing to:

- Professor Dr Amand FAESSLER
Universität Tuebingen
Auf der Morgenstelle 14 – D-72076 TUEBINGEN, Germany
Tel +49.7071.2976370 – Fax +49.7071.295388
e-mail: erice2011@physik.tu-darmstadt.de
- Professor Dr Jochen WAMBACH
Instiüt Kernphysik
Technische Universitaet Darmstadt
Schlossgartenstrasse 9 – D-64289 DARMSTADT, Germany
e-mail: erice2011@physik.tu-darmstadt.de

They should specify:

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

Further information on the School and application forms for fellowships can be found at the same web address.

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 Sicanians 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.infn.it>

PLEASE NOTE

Participants must arrive on September 16, not later than 7 pm.