

INTERNATIONAL SCHOOL OF SUBNUCLEAR PHYSICS

28th Course: PHYSICS UP TO 200 TeV

ERICE-SICILY: 16 - 24 JULY 1990

**Sponsored by the: European Physical Society
Italian Ministry of Education
Italian Ministry of University and Scientific Research
Sicilian Regional Government
Weizmann Institute of Science**

PROGRAMME AND LECTURERS

OPENING LECTURE

The Future of New Flavours (from the Father of Charm)

- S.L. GLASHOW, Harvard University, Cambridge, MA, USA

QCD PHENOMENOLOGY UP TO 200 TeV

Heavy Quarks (c, b, t) Production from 76 GeV up to 200 TeV

- Y. DOKSHITZER, Leningrad Inst. of Nuc. Physics, Gatchina, USSR

Crucial Experiments at 200 TeV

- A. RINGWALD, DESY, Hamburg, FRG

Super Montecarlo Simulations at 16, 40, 200 TeV

- L. CIFARELLI, INFN, Bologna, Italy and CERN, Geneva, CH

Ion Collisions to Reach the 200 TeV Energy Level

- T.D. LEE, Columbia University, New York, NY, USA

THEORETICAL LECTURES

Electroweak Physics at LEP

- R. KLEISS, CERN, Geneva, CH

Non-Standard Origin of CP Violation

- L. HALL, Lawrence Berkeley Laboratory, Berkeley, CA, USA

Effective Lagrangians for Superstring Compactifications

- S. FERRARA, CERN, Geneva, CH and UCLA, CA, USA

Symmetries of Extended Objects

- M. DUFF, Texas A&M University, College Station, TX, USA

REVIEW LECTURES ON EXPERIMENTAL RESULTS

- L. LEDERMAN, Fermi Laboratory, Batavia, IL, USA
- J. STEINBERGER, CERN, Geneva, CH
- S.C.C. TING, MIT, Cambridge, MA, USA and CERN, Geneva, CH

SEMINARS ON SPECIALIZED TOPICS

A Crucial Test for QCD: The Time-like EMFF of the Neutron

- R. BALDINI CELIO, LNF/INFN, Frascati, Italy

New Particle States

- S. BRODSKY, SLAC, Stanford, CA, USA

THE FUTURE OF HIGH ENERGY PHYSICS

LAA - Results and Perspectives

- A. ZICHICHI, CERN, Geneva, CH

THE GLORIOUS DAYS OF PHYSICS

The Origin of SSB: 25 Years Ago

- P.W. HIGGS, University of Edinburgh, UK

CLOSING LECTURE

The New Role of Science

- V.F. WEISSKOPF, MIT, Cambridge, MA, USA

PURPOSE OF THE SCHOOL

The highest energy collider for which a conceptual design has been worked out - the ELOISATRON Project - allows energy levels up to 200 TeV. The purpose of this 28th Course is to review physics endeavours up to this energy limit. Emphasis will nevertheless be given to all relevant results obtained so far at lower energies: CERN, Fermilab, SLAC and other Laboratories.

In previous years theoretical speculations up to and even above the Planck Mass have been encouraged. This year Theoretical Lectures will be allowed provided they can answer the question: «What is the experiment that can prove or disprove the validity of the theoretical model advocated?»

PARTICIPATION

By Invitation Only

POETIC TOUCH

According to legend, Erice, son of Venus, founded a small town on top of a mountain (750 metres above sea level) more than three thousand years ago. The great historian Thucydides (~500 B.C.) said that the Elymi - founders of Erice - were survivors of the destruction of Troy. Ancient historians agreed that Erice was the oldest city of Europe.

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. 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, such as Motya (Phoenician), Segesta (Elymian), and Selinunte (Greek), are to be found in the neighbourhood. In the Aegadian Islands - theatre of the decisive naval battle of the first Punic War (264-241 B.C.) - there are prehistoric murals in Levanzo and paleolithic grottoes in Favignana.

Splendid beaches are at San Vito Lo Capo, Scopello, and Corfino; wild beaches around Monte Cofano, all at less than one hour drive from Erice.

SPECIAL SCHOLARSHIPS

The following special scholarships have been established in honour of, and named after, the late physicists:

PATRICK M.S. BLACKETT	PAUL A.M. DIRAC	ISIDOR I. RABI
JAMES CHADWICK	GUNNAR KÄLLEN	GIULIO RACAH
AMOS DE-SHALIT	ANDRÉ LAGARRIGUE	J. JOHN SAKURAI

These scholarships cover registration fees and full board and lodging in Erice.

- **PLEASE NOTE** that the special scholarships as well as any other form of financial support will be awarded in consultation with the Board of Lecturers at the end of the Course, in order to allow a more direct judgement of all the applicants.

Participants must arrive in Erice on July 16, not later than 5 p.m.

A. ZICHICHI - DIRECTOR

Special Announcement

Information about the Schools and the activities of the CENTRE can be found in the official Journal of the CENTRE:



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