

INTERNATIONAL SCHOOL OF SUBNUCLEAR PHYSICS

27th Course: THE CHALLENGING QUESTIONS

ERICE-TRAPANI-SICILY: 26 JULY - 3 AUGUST 1989

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

PROGRAMME AND LECTURERS

OPENING LECTURE

The Dark Matter of the Universe

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

THEORETICAL LECTURES

The Cosmological Constant Problem

- A. STROMINGER, University of California, Santa Barbara, CA, USA

The Spin of the Quarks Inside the Proton

- G. ALTARELLI, CERN, Geneva, CH

The Hagedorn Transition in String Theories

- J. ATICK, The Institute for Advanced Studies, Princeton, NJ, USA

Exotic Signatures for Supersymmetry

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

Extended Superconformal Algebras and Superstring Compactifications

- T. EGUCHI, Tokyo University, Tokyo, Japan

Effective Lagrangians for Superstring Compactifications

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

Cosmological String Theories and Discrete Inflation

- D.V. NANOPOULOS, Texas A & M Univ., College Station, TX, USA

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

REVIEW LECTURES

FERMI-Lab - First Results

- L. LEDERMAN, Fermi Laboratory, Batavia, IL, USA

SLC - First Results

- B. RICHTER, SLAC, Stanford, CA, USA

Physics at LEP

- S.C.C. TING, MIT, Cambridge, MA, USA and CERN, Geneva, CH

LAA - Results and Perspectives

- A. ZICHICHI, CERN, Geneva, CH

THE GLORIOUS DAYS OF PHYSICS

My Life

- Andreij Dimitri SAKHAROV

CLOSING LECTURE

The New Role of Science

- A. ZICHICHI, CERN, Geneva, CH

PURPOSE OF THE SCHOOL

To review the status of the most significant theoretical and experimental results in the exciting field of High Energy Physics.

Participation by invitation only

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 26, not later than 5 p.m.

A. ZICHICHI - DIRECTOR

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 Cornino; wild beaches around Monte Cofano, all at less than one hour drive from Erice.

Special Announcement

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



Progress in Scientific Culture

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