INTERNATIONAL SCHOOL OF SUBNUCLEAR PHYSICS

24th Course: THE SUPER-WORLD

ERICE - TRAPANI - SICILY: 7 - 15 AUGUST 1986

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
- J. SCHWINGER, UCLA, CA, USA

THEORY OF THE SUPER-WORLD
Supergravity
- P. VAN NIEUWENHUIZEN, SUNY, Stony Brook, NY, USA
Superstrings from supergravity
- S. FERRARA, CERN, Geneva, CH and UCLA, CA, USA
Heterotic superstrings
- D.J. GROSS, Princeton University, Princeton, NJ, USA
Gauge and gravitational anomalies
- L. ALVAREZ-GAUME, Harvard University, Cambridge, MA, USA

PHENOMENOLOGY OF THE SUPER-WORLD
Limits on non-standard phenomena and their implications.
- A. ALTHER, DESY, Hamburg, FRG
Superatics
- P. FAYET, Ecole Normale Superieure, Paris, France
Proton decay in the super-world
- S. RABY, Los Alamos National Laboratory, Los Alamos, NM, USA
Heterotic superstrings
- M. DINE, City College, New York, NY, USA

STARTUP OF THE SUPER-WORLD
Physics at the (pp) colliders (CERN and FNAL)
- C. RUBBIA, CERN, Geneva, Switzerland
Physics at the (e^-e^+) colliders
- S.C.C. TING, MIT, Cambridge, MA, USA
Hadron physics at extreme energies
- G. EKFSONG, University of Stockholm, Sweden

IN THE HEART OF THE SUPER-WORLD
The Eclisatron project
- A. ZICHICI, CERN, Geneva, Switzerland

THE GLORIOUS DAYS OF PHYSICS
The discovery of the symmetry operators: P and T
- E.P. WIGNER, Princeton University, Princeton, NJ, USA

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

PURPOSE OF THE SCHOOL

To review the status of the most significant theoretical and experimental results in the exciting field of the new world: the Super-one.

POETIC TOUCH

According to legend, Erice, one of Venus, founded a small town on top of a mountain (750 metres above sea level) more than three thousand years ago. Homer (~1,000 B.C.), Theocritus (~350 B.C.), Polybius (~200 B.C.), Virgil (~30 B.C.), Horace (~30 B.C.), and others, have celebrated this magnificent spot in Sicily in their poems. Among the sites there, the Cattedo Valli and the Cinghiana Walls can be admired. Other masterpieces of ancient Greek civilization, such as Monreale, Segesta, and Segesta, can be found in the neighbourhood. On the Argonaut islands, which can be reached by cable car plus hydrofoil boat in about two hours, there are prehistoric ruins in the famous grotto of Levanzo, the Grotta Marcella of Marsala, and the recently discovered palaeolithic grooves of Favignana. There are splendid beaches, the farthest about 40 minutes' drive from Erice, at San Vito Lo Capo, Scopello, and Cernia, and wild beaches around Monte Cofano.

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  JAMES CHADWICK  AMOS DE-SHALIT  PAUL A.M. DIRAC  V. JURGOS GLASER  GUNNAR KALLEN  ANDRE LACARRERE  GIULIO RACAH  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 be in Erice on August 7, not later than 5 p.m.

A. ZICHICI - DIRECTOR

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