INTERNATIONAL SCHOOL OF SUBNUCLEAR PHYSICS

XVII Course: POINTLIKE STRUCTURES INSIDE AND OUTSIDE HADRONS

ERICE-TRAPANI-SICILY: 31 JULY - 11 AUGUST 1979

Sponsored by the: • Italian Ministry of Public Education • Italian Ministry of Scientific and Technological Research Sicilian Regional Government Weizmann Institute of Science

PROGRAMME AND LECTURERS

OPENING LECTURE

- « My Impressions on the New Trends in Particle Physics »
- V.F. WEISSKOPF, MIT, Cambridge, MA, USA

THEORETICAL LECTURES

- S. COLEMAN, Harvard University, Cambridge, MA, USA
- A. DE RUJULA, CERN, Geneva, Switzerland
- R.L. JAFFE, MIT, Cambridge, MA, USA
- « Quark Model States and Low Energy Scattering »
- F.E. LOW, MIT, Cambridge, MA, USA
- « Exact Results in the Physics of the New Particles »
- A. MARTIN, CERN, Geneva, Switzerland

REVIEW LECTURES

- « Weak Interactions and Neutrino Physics »
- L.B. OKUN, Academy of Sciences of USSR, Moscow, USSR
- « (e+e-) Physics »
- E. LOHRMAN, DESY, Hamburg, Germany (FRG)
- S.C.C. TING, MIT, Cambridge, MA, USA, DESY, Hamburg, FRG
- « Deep Inelastic Phenomena »
- J.J. AUBERT, LAPP, Annecy, France

SEMINARS ON SPECIALIZED TOPICS

- « Multiple Lepton Phenomena in Neutrino Interactions »
- W.F. FRY, University of Wisconsin-Madison, Madison, WI, USA
- «Farewell to Instantons»
- A. PATRASCIOIU, University of Arizona, Tucson, AZ, USA
- « Is there anything interesting in Pre-charm Physics? »
- R.T. VAN DE WALLE, Nijmegen University, Nijmegen, Holland

A SPECIAL SESSION

- « Is QCD the Ultimate Theory of Hadronic Phenomena? »
- A. DE RUJULA : the Oracle
- J.R. ELLIS the QCD Preacher R. PETRONZIO : the Infidel
- G. PREPARATA : the Heretic
- · W. SCOTT the Deus ex (400 GeV) Machina

HIGHLIGHTS IN OTHER FIELDS

- «The Energy Problem in Europe»
- U. COLOMBO, CNEN, Rome, Italy
- « Very High Speed Computing »
- L. DADDA, Polytechnical Institute, Milan, Italy
- «Status of the Brain-Mind Problem»
- J. C. ECCLES, Contra, Locarno, Switzerland
- « Controlled Nuclear Fusion »
- R.S. PEASE, Culham Laboratory, Abingdon, Berkshire, UK

CLOSING LECTURE

· A. ZICHICHI

PURPOSE OF THE SCHOOL

In spite of the spectacular results obtained in recent times, Subnuclear Physics is far from reaching the asymptotic limit of a field without a future. This is testified by the large number of problems which open up at a rate at least comparable with that of new results. Inside hadrons we have overwhelming evidence for the existence of pointlike structures, like quark-partons and gluons; outside hadrons the pointlike objects are the leptons. This is the beginning of a story, now very clear from the existential point of view. It's solution is the fore front of Subnuclear Physics. The Course will be devoted to reviewing all subjects of experimental and theoretical nature in this basic field of Modern Physics.

SPECIAL SCHOLARSHIPS

The following special Scholarships have been established in honour of, and named after, the late Physicists

PATRICK M.S. BLACKETT GUNNAR KÄLLEN AMOS DE-SHALIT GIULIO RACAH

RICK M.S. BLACKETT JAMES CHADWICK AMOS DE-SE NNAR KÄLLEN ANDRÉ LAGARRIGUE GIULIO RA These Scholarships cover registration fees and full board and lodging in Erice.

According to a 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.

Homer (~ 1,000 B.C.), Theoritus (~ 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. Among the sights there, the Castle of Venus and the Cyclopean Walls can be admired. Other masterpieces of ancient Greek civilization, such as Motya, Segasta and Selinunte, are to be found in the neighbourhood. On the Aegadian Islands, which can be reached by cable car plus hydrofoil boat in about two hours, there are prehistoric murals in the famous grotto of Levanzo, the Grotte Marine of Marettimo, and the recently discovered paleolithic grottoes of Favignana. There are splendid beaches, the farthest about 40 minutes' drive from Erice, at San Vito Lo Capo, Scopello, Cornino, and wild beaches around Monte Cofano.

It is regretted that, owing to the limited number of places available in the lecture hall, it will not be possible to allow any person not selected by the Committee of the School to follow the course.

GENERAL INFORMATION

Persons wishing to attend the Course should write to the Secretary of the School:

Miss MARIA ZAINI International School of Subnuclear Physics CH-1211 Genève 23 - Switzerland

- i) date and place of birth together with their present nationality;
 ii) degree and other academic qualifications;
 iii) list of publications;
 iv) present position and place of work;

- v) a letter of recommendation from their research group leader or from a professor of

The subscription fee is 1,000 Swiss francs. Thanks to the generosity of the sponsoring Institutions, partial support can be given to some deserving students who need financial help. This must be specified and justified in the application letter.

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.

Closing date for application: July 10, 1979 No special application form is required

A letter will be sent to successful applicants by July 15. Students experiencing difficul-ties with travel documentation and needing to know before July 15, whether or not their applications have been accepted, may obtain an earlier special decision by submitting a justified request.

Students must be in Erice on July 31 not later than 5 p.m. Please note that the Calendar Holidays and the School Holidays are totally uncorrelated. More detailed information will be sent to successful applicants together with the letter of acceptance.

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:

