

INTERNATIONAL SCHOOL OF PHYSICS

«ETTORE MAJORANA»

Sponsored by : CERN - European Organization for Nuclear Research
The Italian Ministry of Public Education
The Italian Physical Society.

Place : Eryx (Erice), Sicily.

Period : 26 May - 8 June, 1963.

Subject : «PRESENT PROBLEMS IN STRONG, ELECTROMAGNETIC AND WEAK INTERACTIONS».

PROGRAMME

I. MORNING LECTURES

INTRODUCTION

The aim of these lectures is to introduce the students to the most fundamental concepts and formalisms which will be used during the course.

STRONG INTERACTIONS

Asymptotic behaviour, Symmetries and resonances } theoretical
experimental

ELECTROMAGNETIC INTERACTIONS

Theoretical - Electrodynamics of vector bosons
Experimental - Present status of Q.E.D.

WEAK INTERACTIONS

Universal Fermi interaction, intermediate bosons, etc. } theoretical
experimental

Lecturer

J. S. Bell, CERN, Geneva.

S. Drell, Stanford University, Calif., U.S.A.
G. Puppi, CERN, Geneva, and the University of Bologna.

S. Drell, Stanford University, Calif., U.S.A.
R. L. Garwin, IBM Watson Laboratory and Columbia University, New York, U.S.A.

S. M. Berman, Linear Accelerator Center, Stanford, U.S.A.
V. L. Telegdi, Enrico Fermi Institute for Advanced Studies, Chicago, U.S.A.

V. F. Weisskopf, CERN, Geneva.

II. AFTERNOON WORKING SESSIONS, led by

III. PRESENT RESEARCH PROGRAMMES OF HIGH-ENERGY LABORATORIES

Presented by leading scientists from the various laboratories.

IV. SUMMARY ON PRESENT STATUS OF STRONG, ELECTROMAGNETIC, AND WEAK INTERACTIONS

Closing lecture

V. F. Weisskopf, CERN, Geneva.

PURPOSE OF THE SCHOOL

GENERAL INFORMATION

The school is devoted to those physicists who are interested in having a much deeper theoretical understanding of the field of physics in which they are working.

The school will have a novel feature which is intended to increase the ratio between what is digested and what is presented in a typical summer school. In order to exploit to the fullest extent the material presented at the school, we will have only three lectures per day, two given in the morning (each lecture will last 1 hour). The remainder of the morning will be devoted to the study of what has been said during the two lectures. Two hours of the afternoon will be dedicated to clearing up in free, informal discussion the topics of the morning lectures. The difficult task of leading and guiding the informal discussions will be taken over by Professor Weisskopf.

STRUCTURE OF THE SCHOOL

The structure of the school will be as follows:

10 Invited scientists

These will be physicists actively working in high-energy physics, whose knowledge of the topics to be treated during the course will contribute towards deepening the subject and animating the discussion.

40 Students

These will be selected from amongst applicants according to their scientific qualifications. In this selection the geographical distribution of the students will be taken into account.

POETIC TOUCH

Legend tells that Eryx, son of Venus, was the founder, more than three thousand years ago, of a small town on top of a mountain 750 metres above sea level.

Rumor (=1,000 B.C.), Theocritus (=200 B.C.), Polybius (=150 B.C.), Horace (=70 B.C.), Virgil (=50 B.C.), and others, have celebrated in their poems this magnificent spot in Sicily. There you can admire among other beauties the Castle of Venus and the Cyclopean Walls. Other masterpieces of ancient Greek civilization are found in the neighbourhood, such as Mars, Sagraia and Selinunte. The "Grotte Marine" of the Aeolian islands can be reached by cable-car and flying-boat in about half-an-hour*. In this enchanting place some 30 scientists from all over the world will teach and learn physics.

Persons wishing to attend this course should apply to:

The Director of the School, Nino ZICHIELLI,
CERN - European Organization for Nuclear Research,
Geneva,
Switzerland.

They should specify:

- (i) date and place of birth
- (ii) degree and other academic qualifications
- (iii) list of publications
- (iv) present position and place of work
- and include (v) a letter of recommendation from their research group leader or from a professor of physics.

The total fee, including full board and lodging, to be paid by each student amounts to:

40,000 Italian lire if the student shares the room with another colleague;
50,000 " " if the student wishes to have single accommodation.

Students who wish to be accompanied by members of their family are informed that the average expense per person per day at Eryx is about 3,000 Italian lire.

The Organization of the School will take care of hotel reservations upon specific request of the student.

Closing date for applications : 10 May 1963

Successful applicants will be informed by cable on 10 May. Those students who, because of possible difficulties with travel documentation, would like to know before 10 May whether their application has been accepted, may obtain an earlier special decision upon submitting a justified request.

Admission to the school will be decided by a commission composed of: Prof. G. Bernardini, President of the Italian Physical Society, Prof. V. F. Weisskopf, Director-General of CERN, and the Director of the School.

All students must be in PALERMO on 10 May, either at the railway station, or at the airport, or at the port. From these three places transportation to ERYX will be provided by the School.

A. Zichiehl,
Director of the School.

* All these places are included in the programme of excursions organized by the School.