

Thursday 26 March

CERN COLLOQUIUM

at 16.30 hrs – Auditorium*

Superstring theory – the unification of forces and particles

by M. GREEN / Queen Mary College, London

Superstring theory not only provides a quantum mechanical theory of gravity but also holds out the prospect of explaining the variety of physical forces and elementary particles in terms of a single fundamental principle. This talk will give an elementary description of the structure of superstring theory and the way in which it differs from that of more conventional theories of elementary particles.

* Tea and coffee will be provided at 16.00 hrs.

Friday 27 March

MEETINGS ON

PARTICLE PHYSICS PHENOMENOLOGY

at 11.00 hrs – TH Conference Room

Minijets, QCD and unitarity

by A. CAPELLA / Orsay

We introduce the minijet cross-section, computed from QCD, together with a standard soft component, into a unitarization scheme (eikonal model) and show that most of the increase of the inelastic cross-section between ISR and SPS collider energies is due to the soft component. We also show that the main properties of minijet production, observed by the UA1 Collaboration, can be understood by introducing semi-hard scattering in the dual parton model.

Monday 30 March

TECHNICAL PRESENTATION

from 14.00 to 16.00 hrs – LEP Auditorium
bldg 30, 7th floor

The Control Data Corp. CYBER 930

by Roger LANGLEY / Control Data Corporation, Minneapolis

Control Data Corporation (USA), represented by Control Data (Suisse) SA, will introduce the CYBER 930, a small, powerful system in the CYBER 180 family designed to operate uniquely under the NOS/VEE operating system. The CMOS circuit technology used to build the CYBER 930 permits a very compact design with very low power consumption. All I/O channels have direct memory access with maximum rates of 20 Mbytes per second, thus providing an extremely powerful I/O subsystem.

Language : English

Information : M. Diraison / FI / 4585

Tuesday 31 March

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium

Evidence on neutral B meson mixing at PEP (MAC)

by F. MULLER / CERN and SLAC

Thursday 2 April

CERN COLLOQUIUM

at 16.30 hrs – Auditorium

Evolution of the micro-electronics technology opportunities for Europe

by R. van OVERSTRAETEN / IMEC, Leuven

TRAINING AND EDUCATION ENSEIGNEMENT

ENSEIGNEMENT GENERAL

Tél. 2844

Jeudi 26 mars

de 13.00 h à 13.30 h – Amphithéâtre

Science pour tous

par R. CARRERAS

ACADEMIC TRAINING

Tel. 2844-3364

25, 26 et 27 mars

11.00 h à 12.00 h – Amphithéâtre

Corrosion des métaux et procédés électro-chimiques de traitement de surfaces

par J. AUGUSTYNSKI / Université de Genève
(in French)

30 and 31 March

1 and 2 April

11.00 hrs to 12.00 hrs – Auditorium

Introduction to signal and information theory

by F. de COULON / EPF, Lausanne

A signal is the physical representation of some information that it conveys from its source to its destination. The mathematical description of signals is the fundamental goal of signal theory, which provides the mean to emphasize the primary signal features : its spectral energy distribution or its statistical amplitude distribution, for example. It also provides the methods to analyze the nature of the transformations imposed by signal processing operators, such as those used for converting an analog signal into a digital one. Information theory is a probabilistic theory of messages, which takes into account their statistical properties. It leads to the study of signal and information coding methods applied either to eliminate useless redundancy, or to increase transmission reliability in spite of noise, or to ensure some secrecy. The basic concepts of these complementary theories are reviewed in this lecture series.