

seminars

CERN PARTICLE PHYSICS SEMINARS

Tuesday, October 22
16.30
Auditorium

"Models for e^-e^+ annihilation"
by J. Ellis / CERN

Thursday, October 31
16.30
Auditorium

"The extension of particle physics into the 1,000,000 GeV region"
by C.B.A. McCusker / University of Sydney
Abstract : Cosmic ray results and future prospects on high
 p_T massive particles.

A description will be given of the use of extensive air shower arrays and large emulsion chambers to investigate the transverse momenta occurring in interactions between 10^{14} and 10^{18} eV. The results from these experiments and from experiments at the larger accelerators suggest that these high transverse momenta may be due to the forces acting between the constituent particles of the hadrons. It then seems possible that at these high energies these constituent particles are freed. Past and present searches for these (possibly) massive particles will be discussed. An experiment to investigate the known high transverse momenta and the possible massive particles in detail will be outlined.

INTERSECTING STORAGE RINGS COMMITTEE

Wednesday, October 23
9.30
Auditorium

Open Session :

1. Presentation by D. Schinzel of a Proposal to Search for Electrons and Muons Directly Produced in the Forward Direction : a Hunt for Charmed Particles, CERN-Harvard-Munich-Northwestern-Riverside collaboration.
2. Report by G. Flügge on the Status and Future Plans of Experiment R 401, Isobar Production at ISR Energies, CERN-Hamburg-Orsay-Vienna collaboration.
3. Report by A. Zichichi on the Status of Experiment R 406, Search for New Particles, CERN-Bologna collaboration.
4. Report by D. Wegener on the Status and Future Plans of Experiment R 407 / R 408, Two-Particle Correlations in the Fragmentation Region Using the SFM, CERN-Collège de France-Heidelberg-Karlsruhe collaboration.

Closed Session

Wednesday, October 23
14.30
ISR Conference Room
(L 30/6-003)

CERN COMPUTER SEMINAR

Thursday, October 24
15.00 (*)
Council Chamber

(*) note change of time

"Applications of Approximation Theory in Several Variables"
by Prof. L. Collatz / Institute of Applied Mathematics, University of Hamburg

Abstract : The field of approximation of functions of one variable is highly developed, not only in theory, but also in practice. However, in the case of the approximation of functions of several variables much fewer results are known. In this seminar, a generalization of one-dimensional approximation theory to higher dimensions is discussed and demonstrated by many examples of non-linear approximation of functions of several variables given in a bounded or an unbounded domain. Different types of approximation of functions are presented such as chained approximation and field approximation. They frequently occur in the applications but they are only briefly mentioned in the literature. In addition, applications to initial and boundary value problems for linear or non-linear ordinary and partial differential equations arising in physics and engineering problems will be discussed. Finally, applications to other types of functional equations, e.g. integral equations, are considered.

SPS EXPERIMENTS COMMITTEE

Tuesday, October 29
9.30
Auditorium

Open Session :

1. Proposal to Study Rare Meson Systems Produced in $K^+ p$ Collisions at 18 and 32 GeV/c Using the RF Separated Beam and the Omega Spectrometer at the SPS; J. Dowell; SPSC/74-84/P 21.
2. Proposal to Measure Hadronic Production of High- p_T Leptons and Hadrons; J. Lefrançois; SPSC/74-90/P 24.
3. High Precision Study of Elastic Scattering in the Coulomb Interference Region; T. Ekelöf; SPSC/74-94/P 26.

Wednesday, October 30
9.30
Room A+C

Closed Session

enseignement

ENSEIGNEMENT GENERAL

Lundi 21 octobre
de 13.00 à 13.30
Amphithéâtre

Cours "Connaissance du CERN", par R. Carreras
Leçon 4 : "Les détecteurs"

Jeudi 24 octobre
de 13.00 à 13.30
Amphithéâtre

"Science pour Tous", par R. Carreras

Programme :

I. En Bref

- a. Vu, lu et entendu.
- b. L'énergie d'un cyclone tropical.
- c. Frigos et "sprays" attaquent, par chlorofluorométhane interposés, la couche d'ozone qui nous protège.

II. Question

Proposition I : La Terre a la forme d'une poire (ou plus exactement celle d'une cerise "cœur de pigeon"). Ceci a été largement dit dans la presse avec, à l'appui, un graphique éloquent.

Proposition II : La Terre n'a pas la forme d'une poire. Elle est un ellipsoïde pour ainsi dire parfait.

Ces deux propositions ne sont pas contradictoires. Pourquoi ?

III. Laser et Energie Nucléaire

Le laser, ce rayon de lumière intense, cohérente et de longueur d'onde bien définie, sera peut-être amené à jouer un rôle important dans l'utilisation pratique de l'énergie nucléaire. En effet, en ce qui concerne la fission, il est à la base d'une nouvelle méthode d'enrichissement de l'uranium et dans le domaine de la fusion, il est de plus en plus considéré comme pouvant servir à amorcer la réaction fondamentale.

- Le séminaire aura lieu le même jour, dès 17h.35 à l'amphithéâtre.
- La séance de 13h.00 est retransmise en direct à l'amphithéâtre des ISR.

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ACADEMIC TRAINING

Tuesday, October 22
11.00
Auditorium

"Diffraction Phenomena"
by F. Muller
Lecture 3