

SEMINARS SEMINAIRES

Monday 27 February

EP SEMINAR

at 17.00 hrs - Auditorium

Production of high transverse momentum baryons and mesons in deep inelastic hadronic interactions at the ISR

by T. LOHSE / Univ. of Dortmund

We present recent results from the experiments R 416/R 418/R 419 which were performed at the Split Field Magnet detector at the CERN ISR :

1. *The relative fractions of pions, kaons and (anti-)protons at high transverse momenta above 4 GeV/c were obtained at three different polar c.m.s. angles (10° , 20° and 45°). The transverse momentum, angular and energy dependences will be interpreted in the framework of hard scattering models. A new mechanism for high transverse momentum proton production will be proposed.*
2. *We present first results on particle fractions in high transverse momentum pp, dd and alpha-alpha collisions. Different particle fractions are seen to have different A-dependences.*

Tuesday 28 February

CERN COLLOQUIUM

at 16.30 hrs - Auditorium*

Galileo Galilei and Experimental Science

by Prof. Franco LEVI / Dept. of Physics
Univ. di Perugia, Italy

The role of Galileo in the foundation of the experimental method is universally recognized. However, his contribution should be considered in the light of the peculiarities of his time and conditions. He bravely defied current opinions, in an attempt to find a new source for the discovery of truth, other than Aristotelian methods. As Einstein said : 'His aim was to substitute for a petrified and barren system of ideas the unbiased and strenuous quest for a deeper and more consistent comprehension of the physical and astronomical facts'.

*) Tea and coffee will be provided at 16.00 hrs.

Wednesday 29 February

PS SEMINAR

at 11.00 hrs - PS Auditorium (bldg. 6, 2-024)

Accelerators in Japan and China

by K.H. REICH

A report will be given on the accelerators (operational, being built, or planned) seen respectively discussed during a recent three months' stay at INS, Tokyo. Emphasis is on electron storage rings for work with synchrotron radiation and heavy ion accelerators, including an HIF drive.

Wednesday 29 February

THEORETICAL SEMINAR

at 14.00 hrs - TH Conf. Room

String theory and conformal bootstrap

by A. ZAMOLODCHIKOV / Landau Institute, Moscow

The continuous limit of random surfaces (string theory) is related to a certain massless quantum field theory in two dimensions which is conformally invariant. The bootstrap approach is proposed to solve this theory. We find also a set of exact solutions of the conformal bootstrap equations which describe second-order phase transitions in two dimensional statistical systems.

Thursday 1 March

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs - Auditorium*

The end of a myth :

High P_T physics

by A. ZICHICHI / CERN

So far it has been stated that, in order to compare hadronic interactions with Deep Inelastic Scattering (DIS) and with (e^+e^-) annihilation, it is necessary to use high P_T processes. A review of the data obtained at the ISR and at the CERN Collider, together with the results obtained by the European Muon Collaboration (DIS) and at PETRA (e^+e^-) , shows that low P_T and high P_T processes are indistinguishable. The key point is to use the correct variables which allow all processes to be brought on a common basis of comparison. And this is how the universality features emerge.

* Tea and coffee will be provided at 16.00 hrs.

Friday 2 March

SPECIAL EP SEMINAR

at 16.30 hrs - Auditorium

The DO project - Physics at 2 TeV

by M. MARX / SUNY Stony Brook

The plans for the second experiment at the FNAL Collider will be discussed. The detector will include a high resolution Uranium-Liquid-Argon calorimeter, and will stress identification of leptons as well as excellent measurements of hadron jets.

Monday 5 March

EP SEMINAR

at 17.00 hrs - Auditorium

Performance of a Ring Imaging Water Cherenkov Prototype

by A. BLONDEL / CERN-EP et Ecole polytechnique, Palaiseau

For a neutrino-electron scattering experiment using a Ring Imaging Water Cherenkov Technique a $7m^3$ prototype has been tested in a West Area SPS-beam. First results on the angular- and energy resolution, as well as electron/photon/hadron separation will be presented.

Wednesday 7 March

PS SEMINAR

at 11.00 hrs – PS Auditorium (bldg. 6, 2-024)

The pseudo-spark and its applications

by K. FRANK / University of
Erlangen-Nürnberg

Thursday 8 March

ISOLDE SEMINAR

at 10.30 hrs – TH Conf. Room

Anomalons : Evidence for a
New State of Matter ?

by Buford PRICE / CERN and University of
California, Berkeley

Thursday 8 March

CERN COLLOQUIUM

at 16.30 hrs – Auditorium

Rydberg atoms : Atomic physics on a giant
scale

by S. HAROCHE / Ecole normale supérieure,
Paris

TRAINING AND

EDUCATION

ENSEIGNEMENT

ENSEIGNEMENT GÉNÉRAL

Tél. 2844

La prochaine séance 'Science pour tous'
par R. CARRERAS aura lieu le **jeudi 8 mars** à 13.00 h
à l'Amphithéâtre.

ACADEMIC TRAINING

Tel. 2844

5, 6, 8 and 9 March

at 11.00 hrs – Auditorium

Neutrino cosmology

by J. BERNSTEIN / Stevens Institute, Hoboken

The series will begin by discussing the question : What is a neutrino ? There are several rival possibilities. It will then ask : What is a cosmology ? And it will explore the question of how cosmology can give us a clue, or clues, towards the answer to the first question. We will see that although neutrinos can penetrate light years of lead without interacting, they can, if they have the right properties, determine the ultimate fate of the universe.

INFORMATIONS

GENERALES

GENERAL INFORMATION

REINTEGRATION - Sécurité sociale française

La prochaine permanence de la Sécurité sociale française aura lieu

jeudi 1^{er} mars 1984 de 09.30 h à 11.30 h
salle de conf. n° 2, Dépt PE, Bât. 5, 1^{er} étage.

Les personnes intéressées sont priées de prendre rendez-vous en téléphonant au Secrétariat de la Section des Affaires sociales (tél. 4201).

Section des Affaires sociales
Département du Personnel

INFORMATIONS 'ENERGIE'

DECEMBRE 1983		
Temp. max. : 15° C Temp. min. : -4° C	Temp. moyenne : 2,5° C Degrés-jour. (18) : 481,5	
CONSOUMATIONS	MEYRIN	PRÉVESSIN
Fuel (tonnes) Electricité (GWh)	1 177 29,59	213 32,93
JANVIER 1984		
Temp. max. : 11° C Temp. min. : -5° C	Temp. moyenne : 2,1° C Degrés-jour. (18) : 492	
CONSOUMATIONS	MEYRIN	PRÉVESSIN
Fuel (tonnes) Electricité (GWh)	1 270 10,34	240 3,29

TO ALL CERN U.S. TAX PAYERS

Exclusion from income earned abroad

If you are a U.S. tax payer working at CERN and if you qualify under either the bona fide residence or physical presences test for all of 1983, you may exclude from your foreign income (including CERN income) earned during the year, an amount of up to a maximum of \$ 80,000. However, if you qualify under either test for only part of 1983, you must reduce the \$ 80,000 maximum exclusion on a pro rata basis.

For more details see Publication 54 (Rev. No. 83, issued by the Department of the Treasury, International Revenue Service).

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