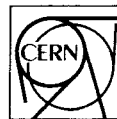
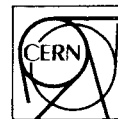


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WEEK MONDAY 5 SEPTEMBER

n° 36/88

SEMAINE DU LUNDI 5 SEPTEMBRE

SEMINARS SEMINAIRES

Tuesday 6 September

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

Experiments on the electric dipole moment of the neutron

by Mike PENDLEBURY / Sussex University

A brief review will be given of the relevance of the neutron electric dipole moment for the theory of fundamental interactions and of the recent results of experiments to look for it. After several decades of searching, are there now hints of a non-zero value?

* Tea & coffee will be served at 16.00 hrs.

Wednesday 7 September

THEORETICAL SEMINAR

at 14.00 hrs – Theory Conference Room

Dynamical entropy and the third law of thermodynamics

by W. THIRRING / Institut für Theoretische Physik, Wien

The classical dynamical entropy is generalized to quantum systems. In contradistinction to the usual entropy it decreases when one takes the restriction to a subsystem. The dynamical entropy of the shift equals the entropy density and thus this notion is particularly useful to discuss the question when the entropy density goes with temperature to zero.

Wednesday 7 September

COMPUTER SEMINAR

at 16.00 hrs – Auditorium*

Neural networks in high energy physics

by Bruce DENBY / Laboratoire de l'Accélérateur Linéaire, Orsay

Neural Network research, a field born in the 1940s from efforts to understand how information is processed in the brain, has experienced an explosive resurgence in the last six years. Computer models of Formal Neural Networks, highly-interconnected

arrays of single-bit quasi-analogue processors, have now been successfully used in such diverse applications as recognition of sonar targets, speech synthesis and stock market forecasting. Hardware networks, implemented in VLSI, have been shown to provide enormous speedups for computationally intensive problems such as pattern recognition, and as such could be of considerable interest in High Energy Physics. After a brief review of the principles of Neural Networks, possible applications to track-finding, cluster-finding in calorimeters, and triggering will be discussed.

Dr Bruce Denby is a physicist currently working at the Linear Accelerator Laboratory in Orsay, France. He received his B.S. and M.S. degrees from Caltech and Rutgers, respectively, and his PhD from the University of California, Santa Barbara, in 1983. He worked for the Rutherford Appleton Laboratory as a collaborator on the UA1 experiment at CERN from 1983-86, when he joined the staff at Orsay. He is currently working with the Computing Department at Orsay to investigate the possibility of using Neural Network methods in High Energy Physics data analysis and triggering.

* Coffee and tea will be served at 15.30 hrs

Friday 9 September

MEETINGS ON

PARTICLE PHYSICS PHENOMENOLOGY

at 11.00 hrs – TH Conference Room

Have we seen collective transverse flow in the recent high energy nuclear collisions at CERN?

by Ulrich HEINZ / Regensburg

The transverse momentum spectra for pions observed by WA80 and NA35 collaborations are analysed within a fireball model with collective isentropic expansion and a freeze-out criterion. By varying the initial state of the fireball, an excellent fit to the data is achieved for all measured range of p_T . Differences in the spectral slopes for central and peripheral collisions originate in our model from a large number of participating nucleons and a large initial energy density in the central collisions. Based on additional information from two-pion correlations we find that an initial energy density of 1.5-2 GeV/fm³ is sufficient to explain the shape of the spectra from central O + Au collisions at 200 GeV/n.

Monday 12 September

LEP MACHINE ADVISORY COMMITTEE

Open session

at 14.00 hrs – LEP Auditorium
bldg 30, 7th floor

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|-------|--|-------------------------------------|
| 14.00 | <i>Beam transfer and LEP injection tests</i> | N. Siegel
A. Hofmann
S. Myers |
| 16.00 | <i>Status report on superconducting cavity R&D</i> | Ph. Bernard
H. Lengeler |
| 17.00 | <i>First beam storage in HERA electron ring</i> | G.A. Voss |

Closed session

Tuesday 13 September, at 11.00 hrs,
DG Conference Room, 6th floor, Main Building.

Lundi 12 septembre

PRESENTATION TECHNIQUE

de 15.00 à 16.30 h – bât. 17, 1-007

ISSET (F) propose en démonstration un système de surveillance électronique (vidéo) professionnel.

Moyen de liaison : matériel de transmission d'informations par système radio pouvant émettre et recevoir à distance (de 100 à 30000 mètres).

Applications : sécurité des biens et des personnes, détection incendie.

Langue : français

Renseignements : M. Diraison / FI / 4585

Monday 12 September

EP SEMINAR

at 16.30 hrs - Auditorium

Searching for the quark-gluon plasma : results from the HELIOS experiment

by J. SCHUKRAFT / CERN

After the end of the first round of Heavy Ion experiments at CERN with ^{16}O and ^{32}S beams accelerated in the SPS up to 200 GeV/nucleon, this talk will summarize our present experimental knowledge about Nucleus-Nucleus collisions at high energies. The emphasis will be on results from the HELIOS (NA34/2) collaboration on a systematic study of global event features (E_t , multiplicity, inclusive particle spectra) and the search for signals (photons, soft lepton pairs, strange particles) of the quark gluon plasma, conjectured to be formed in ultra-relativistic nuclear collisions. The data will be compared and complemented by results from the other Heavy Ion experiments both at CERN and Brookhaven.

Mardi 13 septembre

PRESENTATION TECHNIQUE

de 14.00 à 16.00 h – bât. 17, 1-007

Dimatel (F), fabricant sous licence C.E.A. des transmetteurs de mesure, propose une démonstration.

Langue : français

Renseignements : M. Diraison / FI / 4585

Wednesday 14 September

TECHNICAL PRESENTATION

10.00 to 12.00 hrs – EF Conference Room
bldg 13, 2-005

ACL (Advanced CMOS Logic) presentation by Zoltan Varga, GE Solid State München (D), Swiss representative Baerlocher AG.

Language : English

Information : M. Diraison / FI / 4585

Wednesday 14 September

LEAR DISCUSSION MEETING

at 16.00 hrs – PS Auditorium
bldg 6, 2-024

Rare decays of mesons

by T. N. TRUONG / Ecole Polytechnique, Palaiseau

Thursday 15 September

CERN COLLOQUIUM

at 16.30 hrs – Auditorium

Movement and intelligence

by J. C. HAUSMANN / Université de Genève

TRAINING AND EDUCATION ENSEIGNEMENT

Service d'appui linguistique

Il reste encore quelques places dans le cours d'anglais niveau débutant de ce trimestre (du 26 septembre au 16 décembre).

Ce cours est particulièrement destiné aux membres du personnel ayant besoin de l'anglais dans leur travail.

Si c'est votre cas, contacter rapidement les professeurs d'anglais, tous les matins entre 10.00 et 12.00 h, au 2957.