

SEMINARS

SEMINAIRES

Monday 11 February

PRESENTATION

at 10.00 hrs - DD Amphitheatre
(bldg 31, 3rd floor)

Overview of IBM's Systems Network Architecture (SNA)

by Mr. NIES/IBM

Systems Network Architecture (SNA) is IBM's approach to a unified data communications structure, which has been developed over the past ten years. Currently available in MVS and VSI environments only, recent announcements will extend this support to VM over the next twelve months. The speaker will give an overview of SNA and discuss some of the hardware supported by it. He will also cover support for X.25 and the relationship of SNA to the ISO OSI model.

Monday 11 February

EP SEMINAR

at 16.30 hrs - Auditorium

Semiconductor drift chambers

by Emilio GATTI / Politecnico, Milan

Working principles - dynamics of diffusion and drift space and energy resolution for single events in one and two coordinates - time resolution - open problems — future developments.

Tuesday 12 February

LEP MACHINE ADVISORY COMMITTEE

Open session

at 14.00 hrs - LEP Auditorium (bldg. 30, 7th floor)

14.00 Status report on RF

Copper RF System

by W. SCHNELL

Superconducting RF System

by H. LENGELER

16.00 **Effect of reactive feedback on transverse mode coupling instability**
by S. MYERS

Closed session

Wednesday 13 February at 11.00 hrs - 6th floor
Conference Room, Main building.

Tuesday 12 February

CERN COLLOQUIUM

at 16.30 hrs - Auditorium*

The digital optical super computer

by A.W. LOHMANN / University of Erlangen

There are two distinct reasons for attempting to build a digital optical computer (DOC). The DOC would suffer

less from electromagnetic interferences (EMP-hardened); the DOC is better suited as highly parallel multi-processor. Why? The necessary interconnections are easier to implement via light rays in free space instead of by electrons in a mesh of wires. To perform logic operations one needs nonlinear interactions between light beams. Recent progress in nonlinear optical materials (super lattices, multiple quantum well) has encouraged several groups to start a DOC project.

* Tea and coffee will be provided at 16.00 hrs.

Wednesday 13 February

PS SEMINAR

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

Low beta structures

by A. KLEIN/Institut fur Angewandte Physik,
Frankfurt

Various structures for the acceleration of ions at low velocities have been developed in Frankfurt. At first, the talk will review some drift tube structures (spiral and split-ring loaded cavities, IH resonator) and then concentrate on recent work done with different kinds of RFQ structures (four rod lambda/2-type, four vane resonator, split-coaxial accelerator in co-operation with GSI) and with the MEQALAC in cooperation with the FOM-Institute, Amsterdam. Sparking phenomena and the Kilpatrick law will also be discussed.

Wednesday 13 February

THEORETICAL SEMINAR

at 14.00 hrs - TH Conference Room

Strings in (Lattice) QCD

by P. OLESEN / CERN

From various lattice QCD Monte Carlo calculations in three and four dimensions, the following features emerge:

- 1) the Wilson loops are found to be well described by a simple model for the vibrating string;*
- 2) QCD contains several strings corresponding to quarks in higher representations, for example there exists a string with gluons attached to the end points ('the adjoint string*');*
- 3) confinement in the sense of string formation is a more complicated problem than expected in the ZN confinement mechanism.*

Thursday 14 February

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs - Auditorium*

Final results on the determination of the electroweak mixing angle from the measurement of the ratio of cross-sections for elastic scattering of muon neutrinos and antineutrinos off electrons

by C. SANTONI / CERN and INFN Sez.
Sanita, Roma (CHARM Collaboration)

A new experimental determination of the electro-weak mixing angle θ_w , based on a second exposure of the CHARM calorimeter to the CERN SPS wide-band beam is reported. The total sample of events collected in the

detector during the two exposures is (83 ± 16) neutrino-electron events and (112 ± 21) antineutrino-electron events, leading to the final result $\sin^2 \theta_W = 0.215 \pm 0.032$ (stat.). The systematic error is estimated to be ± 0.012 .

Other recent measurements of the mixing angle in purely leptonic reactions will be discussed and an outline of future experiments will be given.

* Tea and coffee will be provided at 16.00 hrs.

Monday 18 February

EP SEMINAR

at 16.30 hrs-Auditorium

Prompt positrons at low PT in
63 GeV pp collisions

by Vincent HEDBERG/CERN-EP

The production of inclusive prompt positrons at low PT has been measured by the AFS-collaboration at the CERN I SR. The data show a strong increase in the positron/pion ratio below PT = 0.3 GeV/c which cannot be explained by the semi-leptonic decay of charmed particles, other known hadronic decays, or hadron bremsstrahlung.

Tuesday 19 February

SPECIAL EP SEMINAR

at 14.30 hrs - Auditorium

Observation of a neutrino signal from
Cygnus X-3 with the 1MB experiment

by J.G. LEARNED / University of Hawai

PLEASE NOTE UNUSUAL DAY

Tuesday 19 February

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs-Auditorium

Do neutrinos decay? Do they oscillate?

by F. VANNUCCI / LPNHE, University of
Paris VI & VII

Wednesday 20 February

DD SEMINAR

at 16.00 hrs - DD Amphitheatre
(bldg.31,3rd floor)

Database aspects during the development of the
database for the personnel monitoring service

by M. REITENSPIESS

Thursday 21 February

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs - Auditorium

Measurement of the electron asymmetry

in the beta decay of the polarized sigma minus
hyperon. Results from a Tevatron experiment
at Fermilab

by Per GRAFSTROM/CERN and University of
Uppsala

TRAINING AND

EDUCATION

ENSEIGNEMENT

ENSEIGNEMENT GENERAL

Tel. 2844

Jeudi 14 février

de 13.00 h à 13.30 h - Amphitheatre

Science pour tous

par R. CARRERAS

Mardi 12 février

LES SCIENCES AUJOURD'HUI

à 20.00 hrs précises - Auditorium

(jusqu'à environ 22.00 hrs)

par R. CARRERAS

3^e soirée

(Prochaine séance: le mardi 12 mars)

Rafel Carreras, responsable du programme d'Enseignement general au CERN, comment era et expliquera un choix d'articles parus récemment dans des revues scientifiques, et qui couvrent l'ensemble des sciences physiques et biologiques ainsi que certains aspects des relations science-société.

**Une attention particulière est portée au langage et aux notions utilisées afin que les explications et les commenta-
tes soient accessibles aux personnes n'ayant pas de formation scientifique.**

Entree libre.

(Please note that the conference will be given in
FRENCH.)

Service des Relations Publiques

Tel. 2722