

SEMINARS SEMINAIRES

Monday 13 March

EF SEMINAR

at 11.00 hrs – EF Conference Room
bldg 13, 2-005

R&D in silicon detectors and micro-electronics

by Erik HEIJNE / CERN-EF

Collaborating closely with various specialized European institutes we have been engaged for several years in the development of prototype building blocks for integrated detector readout architectures. Most circuits are designed with silicon pixel detectors in mind, but can be easily adapted to applications involving other types of particle detectors, like pad detectors or calorimeter elements. The development strategy will be discussed, including technology choices, radiation resistance, availability, etc., and some preliminary results will be shown.

Monday 13 March

EP SEMINAR

at 16.30 hrs – Auditorium

Results on D and D_s decays from Mark III

by S. R. WASSERBAECH / Stanford University

Recent results on weak decays of D and D_s mesons are presented. These studies were performed using e^+e^- annihilation data collected on the $\Psi(3770)$ and at $\sqrt{s} = 4.14$ GeV with the Mark III detector at SPEAR. Topics of study include hadronic and semileptonic D_s decays, resonant substructure in $D \rightarrow K \pi \pi \pi$, and determination of $|V_{cd}/V_{cs}|^2$ from measurements of exclusive semileptonic D decays.

Tuesday 14 March

LEP EXPERIMENTS COMMITTEE

at 09.00 hrs – Auditorium

Open session

- | | |
|---------------|-----------------------------------|
| 09.00 - 09.20 | Introductory remarks
C. Rubbia |
| 09.20-09.50 | Status of LEP
E. Picasso |
| 09.50-10.20 | LEP commissioning
S. Myers |
| 10.20-10.45 | Coffee break |
| 10.45-11.00 | Status of SLC
R. Taylor |

11.00-11.30 *Proposal for a single Bremsstrahlung monitor for measuring luminosity, beam divergence and longitudinal polarization (Università di Roma and INFN Roma; LEPC 88-7/I 8, LEPC 89-5/I 8 Add.1; G. Diambri-Palazzi)*

Status of LEP Experiments

11.30-12.15	DELPHI
12.15-13.00	ALEPH
14.00-14.45	L3
14.45-15.30	OPAL

Closed session

at 16.00 hrs, 6th floor Conference Room, Administration building, to be continued on Wednesday 15 March at 09.00 hrs.

Tuesday 14 March

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

Recent results of the TRISTAN experiments

by T. NOZAKI / KEK, Japan

Recent experimental results from TRISTAN are reported on the test for the electroweak and QCD theory as well as on the search for new particles.

* Tea & coffee will be served at 16.00 hrs.

Wednesday 15 March

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Heavy quark jets in $p\bar{p}$ collisions

by B. LAMPE / CERN

I have calculated QCD corrections to a two-jet cross-section in $p\bar{p}$ collisions. These corrections are important, because the lowest-order contributions do not really lead to a definite prediction for the cross-section. In the course of the calculation, particular properties of the gluon play an important role. The methods which I am going to present are applicable also to other jet cross-sections in $p\bar{p}$ collisions.

Mercredi 15 mars

SEMINAIRE DD

à 16.00 h – Amphithéâtre DD
bât 31, 3-005

La sécurité sur site d'expérience en physique des hautes énergies par système expert

par Francois CHEVRIER / CERN-EP

Dans un environnement mélangeant à la fois gaz inflammable, air, équipements électroniques, il est

primordial de surveiller attentivement l'environnement pour empêcher tout accident d'arriver. Dans le cadre concret de chacune des 4 expériences du LEP, 1000 capteurs mesurent les paramètres caractérisant l'environnement. Après une étude approfondie, nous avons été convaincus que l'approche 'systèmes experts' pouvait nous apporter rapidité de mise en œuvre et maintenabilité du système, sécurité, fiabilité et stabilité de l'application. Il nous a ensuite fallu trouver un système de développement qui soit performant et satisfasse nos besoins :

- *notion de temps réel*
- *grand nombre de paramètres*
- *grand nombre de règles*
- *ouverture au monde extérieur*

Thursday 16 March

FDDI TUTORIAL AND WORKSHOP

Tutorial : 09.00 to 12.15 hrs – TH Conference Room, bldg 4/3-006

Workshop : 14.00 to 17.00 hrs – Conference Room, bldg 54/2-035

The ANSI Fibre Distributed Data Interface (FDDI)

by Norman C. STROLE / IBM Corp.,
Research Triangle Park, NC, USA &
Charles LOUISSON / Advanced Micro
Devices, Basingstoke, GB

Local area network (LAN) technology continues to evolve to meet growing LAN bandwidth requirements as more powerful workstations and sophisticated applications emerge. The ANSI Fibre Distributed Data Interface (FDDI) token-ring standard, embracing both high-speed optical fibre and VLSI circuit technology, promises to satisfy the high-speed backbone requirements of future campus-wide networks. This presentation will provide a general overview of FDDI and address several aspects of the access protocol. The current status of the FDDI standard will be discussed, including a discussion of some of the problems that have slowed the progress of the standard.

The afternoon session is for those wishing to pursue the subject in greater detail with the two speakers.

Thursday 16 March

SCIENCE AND SOCIETY SEMINAR

at 16.30 hrs – Auditorium*

Superphénix : some aspects of the safety of LMFBRs

by Pierre TANGUY / Electricité de France

The safety case for fast neutron reactors, cooled with liquid sodium, will be briefly reviewed, with special emphasis on reactivity accidents, plutonium, and sodium-air and sodium-water interactions. The capability to confine the consequences of a core disruptive

accident will be analysed in the light of the lessons learnt from the Chernobyl catastrophe. The safety significance of the sodium leak detected 18 months ago in Creys-Malville will be presented. The economy of LMFBRs and their possible role in the world's energy future will be discussed.

* Tea & coffee will be served at 16.00 hrs.

Vendredi 17 mars

PRESENTATION TECHNIQUE

14.00 - 17.00 h – Amphithéâtre LEP
bât. 30, 7e étage

Kontron (CH) propose un séminaire/présentation du logiciel P-CAD (USA/B) fonctionnant sur un PC du type KAT-386 de Kontron (D).

Langue : français

Renseignements : M. Diraison / FI / 4585

Monday 20 March

TIS SEMINAR

at 14.30 hrs – PE Auditorium (Techn. Training)
bldg 593, room 11

Effects of small doses of radiation

by A.H. SULLIVAN / Radiation Protection
Group, CERN-TIS

A recent conference on the effects of low doses of ionizing radiation will be reviewed. New data from atomic bomb survivor studies as well as updates on observations of mortality among persons who have been professionally exposed were reported. The improved data is causing some rethinking on the risks from low levels of radiation, and proposed methods of making risk projections for the exposure of whole populations and for radiation workers will be presented. The possible consequences of exposure to low levels of radiation, including natural radiation and radiation originating from other than the nuclear industry, will be discussed.

Monday 20 March

EP SEMINAR

at 16.30 hrs – Auditorium

Jet fragmentation properties from CDF

by B. HUBBARD / LBL

Results will be presented on the charged fragmentation function and charged multiplicities from jets produced in proton-antiproton collisions at $\sqrt{s} = 1.8$ TeV. These results are examined over the di-jet invariant mass range 60-200 GeV/c², and compared with predictions from QCD scale breaking.