

SEMINARS SEMINAIRES

Monday 21 November

EF SEMINAR

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

Picosecond laser pulses for photocathode research

by Kryno GEISSLER / CERN-EF

For future linear colliders like CLIC, high intensity very short electron bunches will be needed. Picosecond laser-driven photocathodes are a promising way to produce them efficiently. Several methods of generating ultrashort high power UV pulses from solid state and dye lasers and their use in the field of R&D on new photocathode materials will be presented.

Monday 21 November

EP SEMINAR

at 16.30 hrs – Auditorium

Recent results in charm physics from E-691 at FNAL

by J. RAAB / CERN

In the 1985 fixed target run at FNAL the photo-production experiment E-691 recorded 100 million events resulting in a large number of reconstructed charm events. After the precision measurements of the D-meson lifetimes and setting an upper $D^0\bar{D}^0$ mixing limit, E-691 continues to add valuable information to the charm physics sector. This presentation will center on the recent measurements of some hadronic and semi-leptonic branching ratios, the observed D-meson spectroscopy, and perhaps more if time permits.

Mercredi 23 novembre

PRESENTATION TECHNIQUE

de 09.00 à 12.00 hrs – Amphithéâtre LEP
bât. 30, 7e étage

Séminaire IBM Suisse

Sujet : présentation et informations sur Cartridge IBM 3480.

Produits : bandes magnétiques en cassette pour sous-système à bande magnétique IBM 3480.

Langues : anglais, français

Renseignements : M. Diraison / FI / 4585

Wednesday 23 November

PS SEMINAR

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

Selected topics in accelerator technology developments

by Hans RIEGE / CERN-PS

Past, present and future of the new developments on pseudosparks, plasma lenses and particle beam sources based upon emission from ferro-electrics are considered. Their importance for general and accelerator technology will be outlined. Specific applications developed at CERN, such as high-power closing switches, the ACOL plasma lens and high-density electron beam sources are described.

Wednesday 23 November

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Rational conformal field theories, quantum groups and the theory of knots and links

by German SIERRA / CERN

The fusion algebra and the polynomial equations of any Rational Conformal Field Theory (RCFT) can be understood from a new symmetry algebra closely related to quantum groups. The theory of knots and links, and in particular the Jones polynomials, arises in a large class of RCFTs. These two connections seem to be very fruitful in the understanding and classification of RCFTs.

Wednesday 23 November

CAS ACCELERATOR SEMINAR

at 14.30 hrs – Council Chamber*

The fourth lecture in the John Adams' memorial lecture series

Beam mode observation

by F. PEDERSEN / CERN-PS

Beams circulating in synchrotrons can oscillate coherently in numerous longitudinal and transverse modes. A review of these modes is presented. In certain cases electromagnetic interactions with the surroundings cause spontaneous growth of a mode : i.e. a coherent instability occurs. Stable modes can be driven by external excitation, which can be used to determine stability margins and many beam properties. Observation of coherent modes after injection can be used to determine injected beam properties. Finally, recent evidence for a transverse quadrupolar ion-antiproton instability in the CERN AA is presented.

* Tea & coffee will be served at about 16.00 hrs (after the lecture).

Friday 25 November

DD SEMINAR

at 15.00 hrs – DD Auditorium
bldg 31, 3-005

The DN10000 APOLLO RISC Computer

by John YATES / APOLLO US

The APOLLO RISC Computer, the DN10000, is arguably the computer industries, most advanced workstation, containing architectural features usually associated with machines in the mainframe or supercomputer class. This technical talk on the DN10000 will be presented by one of its principal architects. John Yates has been a senior engineer in the compiler group at APOLLO computer for a number of years. He has been responsible for the PASCAL compiler and the code generators for the existing 68000 based machines. John is one of the principal architects for a new generation of structured compilers/code generators and is heavily involved in the design of the DN10000.

Monday 28 November

EF SEMINAR

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

REPORT on the IEEE 1988 Nuclear Science Symposium in Florida

by Tiziano CAMPORESI / CERN-EP

The talk will cover selected topics from the conference which was held from November 9-11 in Orlando, Florida.

Monday 28 November

EP SEMINAR

at 16.30 hrs – Auditorium

Observation of large Λ polarization in exclusive diffractive processes at the ISR

by T. HENKES / MPI Heidelberg

We present an analysis of diffractively produced exclusive final states from the experiment R608 at the ISR. The longitudinal alignment of the final state particles with the beam direction observed earlier in $pp \rightarrow [\Lambda \phi K^+]p$ is now also found in $pp \rightarrow [\Xi^- K^+ K^+]p$. In addition the analysis of $pp \rightarrow [\Lambda K^+]p$ shows the same type of alignment as well as a large Λ polarization (up to 80%). All these results are inconsistent with a fireball character of diffractively produced final states and point rather to a longitudinal structure caused by the interaction between beam partons and the exchanged Pomeron. The ensuing hadronization and Λ polarization are described, at least qualitatively, by the Lund String Fragmentation Model.

Mardi 29 novembre

PRESENTATION TECHNIQUE

de 10.00 à 16.00 h – Amphithéâtre LEP
bât. 30, 7e étage

René Faigle SA (CH) propose en démonstration la nouvelle gamme des produits NASHUA (GB, J, NL).

Wednesday 30 November

OPEN MEETING

at 14.30 hrs – PS Auditorium
bldg 6, 2-024

Accelerator computing requirements in the nineties

Wednesday 30 November

COMPUTER SEMINAR

at 16.00 hrs – Auditorium

The ETA-10 and the future of worldclass supercomputing

by Carl LEDBETTER / Control Data and ETA Systems, USA

Thursday 1 December

TECHNICAL PRESENTATION

09.00 to 12.00 hrs – PS Auditorium
bldg 6, 2-024

Gespac seminar by Gespac SA (CH)

Thursday 1 December

PRESENTATION

10.00 to 12.00 hrs & 14.00 to 16.00 hrs
DD Auditorium, bldg 31, 3-005

Single height VMEbus products

by N. HAUSER / PEP Modular Computers, West Germany

Jeudi 1 décembre

SEMINAIRE ST/CV

à 14.30 h – Baraque Enseignement
bât. 593

Directives européennes pour la chaudronnerie et la tuyauterie

par B. CIBORRA / Franco-Tosi/Politecnico Milano

Thursday 1 December

CERN COLLOQUIUM

at 16.30 hrs – Auditorium

**Haleakala high energy gamma ray studies of
Herc x-1 pulsar system**

by W.F. FRY / University of Wisconsin and
Michigan

Friday 2 December

DD SEMINAR

at 10.00 hrs – DD Auditorium

bldg 31, 3-005

Design architecture of mainframe computers

by Robert DORAN / CERN-DD

Vendredi 2 décembre*

SEMINAIRE EF

à 11.00 h – Salle de Conférence EF

bât. 13, 2-005

**CAO pour le design d'ASICs utilisés dans le
traitement des signaux**

par Patrice SENN / CNET France

** Veuillez noter le jour inhabituel!*

Monday 5 December

NOBEL CELEBRATION

at 15.30 hrs – Auditorium

Welcome

Talks by Melvin SCHWARTZ

Jack STEINBERGER

Leon LEDERMAN

*Refreshments will be served after the meeting in the
Salle des Pas perdus.*

TRAINING AND EDUCATION ENSEIGNEMENT

ENSEIGNEMENT GENERAL

Tél. 2844 - 5811

Jeu 24 novembre

de 13.00 h à 13.30 h – *Salle du Conseil**

Science pour tous

par R. CARRERAS

** Veuillez noter le changement de lieu!*

ACADEMIC TRAINING

Tel. 2844-2460

21, 22, 23 & 24 November

11.00 to 12.00 hrs – *Council Chamber**

Elementary introduction to supersymmetry

by S. FERRARA / CERN-TH

** Please note change of place!*

28, 29 & 30 November

1 & 2 December

11.00 to 12.00 hrs – Auditorium

Theory of RF waveguides and cavities

by G. DOME / CERN-SPS

After reviewing very briefly the basic principles of an RF system for particle acceleration, these lectures deal more specifically with waveguides and cavities. Starting from Maxwell's equations, a general theory is developed in detail for all waveguide and cavity modes. Periodically loaded waveguides are given as an example of accelerating structure. The parameters which characterize the interaction of resonant cavities with a particle beam are introduced, for both longitudinal and transverse motions. Reflection and transmission coefficients are derived for a cavity with input loop, output loop and beam. Finally, a proof is given of the validity of equivalent circuits for representing the behaviour of a cavity in the vicinity of a resonance, in the presence of both a beam and an RF generator.