

# SEMINARS SEMINAIRES

---

## Monday 26 November

### EF SEMINAR

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

#### A decade of electroweak interactions

by D. HAIDT / DESY

*The development in understanding electroweak phenomena is illustrated by means of a few selected experiments.*

## Tuesday 27 November

### COMPUTER USERS MEETING

at 14.00 hrs – Auditorium

#### Agenda :

- The extension of the central computers
- Introduction of VM
- The CDC service
- Changes in tape handling
- Any other business.

## Tuesday 27 November

### CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium\*

#### The X-ray spectrum of antiprotonic hydrogen formed in H<sub>2</sub> gas

by Rolf LANDUA / CERN-EP

*The X-ray energy spectrum emitted in the cascade process of  $p\bar{p}$  atoms allows to study the strong interaction at threshold. Detected X-ray transitions can also be used to flag the initial atomic state from which a  $p\bar{p}$  annihilation has occurred. The mode of operation and the performance of the X-ray detector used in the ASTERIX experiment at LEAR will be discussed. First results on the observation of K and L lines from  $p\bar{p}$  atoms formed in H<sub>2</sub> gas will be presented.*

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

## Wednesday 28 November

### TECHNICAL PRESENTATION

09.30 to 16.00 hrs – Bldg. 73, room 2-027

#### LeCROY Research Systems SA

*LeCROY Research Systems SA (USA/CH) will exhibit and demonstrate :*

#### 1) HEP Division :

*NIM Modules, CAMAC Modules, FASTBUS Modules, Power Supplies, Chamber Readout, Fiberoptic Products.*

#### 2) ADTEC :

*Fast Waveform Analyzer Systems, 3500 Intelligent CAMAC Systems, Spectroscopy Products, Transient Recorders, Data Loggers, Fast Video Digitizer*

*System, Signal Processing, QVT Multichannel Analyzer, 8013-GPIB, IBM-PC Portable.*

#### 3) EPD Division :

*NIM Module, Fast Encoding TDC, Drift Chamber Readout System, Fast Encoding ADC, ECL Modules, Intelligent Crate Controller.*

Language : English

Information : M. Diraison / FI / 4585

## Wednesday 28 November

### THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

#### The 'rheonomy principle' in the construction of supergravity models

by P. FRE / CERN

*The so-called 'group-manifold approach' to supergravity will be briefly reviewed, centering the discussion on the 'rheonomy principle' which is at the basis of the whole method. The different point of view taken here for the construction of supergravity models, with respect to the Noether coupling and superspace techniques, will be emphasized. In particular, I will stress the importance of the generalized action principle which might imply new results at the quantum level, discussing the concepts of invariance of the action, closure and non-closure of the off-shell algebra. I will conclude by pointing out that, due to the broader point of view, there are supergravity models in the group-manifold approach which do not exist in the Noether approach.*

## Wednesday 28 November

### SPECIAL PS SEMINAR

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

#### Magnetic field calculations

by Prof. RICHTER / GRAZ Institut

*A presentation of tools used for linear magnetic field calculations in 2 and 3 dimensions using the finite element method will be made. Some applications will be described (for magnets, kickers, transformers, etc.). A short movie for simulation of eddy currents will also be presented.*

## Wednesday 28 November

### DD SEMINAR

at 16.00 hrs – DD Amphitheatre  
bldg. 31, 3<sup>rd</sup> fl.

#### Network support facility at the IBM San Jose Research Laboratory

by Tom HEALD\*

*An overview of the Network Support Facility used at San Jose Research will be presented from the design and performance objectives of the project. Both the current implementation and future plans will be discussed. The presentation will cover communication used at San Jose Research across the following environments :*

*Net Backbone : Interconnection of large autonomous Networks via terrestrial and satellite communications.*

Central Host : *Large centralized services provided to a users community on a subscription basis.*

Distributed Host : *Smaller autonomous 'Department' systems dedicated to a specific user community or project.*

*Distributed Workstations on several local area networks.*

\*) Former manager of the VM service and Development Department and the Interactive Networking Services Department at San Jose Research. He is now on a temporary assignment to IBM Switzerland working at CERN. His primary interests are local area networks and intelligent workstations.

## Jeudi 29 novembre

## Vendredi 30 novembre

### PRESENTATION TECHNIQUE

#### Jeudi 29 novembre

13.30 h à 16.00 h – Site de Prévessin,  
parking bât. 867

#### Vendredi 30 novembre

09.00 h à 11.30 – Site de Meyrin,  
parking PTT, bât. 63

*SIEMENS-ALBIS SA (D/CH) présente la gamme SIMATIC S5, automates programmables, avec ses dernières nouveautés.*

Langues : allemand, anglais, français

Renseignements : M. Diraison / FI / 4585

## Friday 30 November

### ECFA MEETING

at 09.00 hrs – Council Chamber

1. *Approval of the Draft Minutes of the Thirty-fifth Plenary ECFA Meeting*
2. *Approval of the Draft Agenda*
3. *Chairman's Report.*
4. *Report on the ECFA-CAS-INFN Workshop on the generation of high fields for particle acceleration to very high energies, Frascati, 25 September to 1 October 1984 (J.H. Mulvey).*

### LUNCH

5. *Report on LEP Status : Machine (E. Picasso)*  
*Experiments (I. Butterworth)*
6. *Report on the discussion meeting on HERA Experiments, Genoa, 1-3 October 1984 (V. Soergel).*
6. *The scientific activities of CERN and budget estimates 1985-1988 (H. Schopper).*
8. *Dates of ECFA Meetings 1985.*
9. *Any other business.*

## Monday 3 December

### EF SEMINAR

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

#### Supersymmetry for pedestrians

by S. FERRARA / CERN

*The idea of supersymmetry in elementary particle physics will be reviewed. Supersymmetry is a symmetry with*

*the unique property of connecting bosons and fermions, the building blocks of matter, and their fundamental interactions. This symmetry has also the fascinating property of modifying the geometry of space-time and it relates the gravitational force to the other basic interactions. The possible relevance of supersymmetry in particle physics, at energies comparable to the Fermi scale  $M_W$ , and its theoretical motivation will be discussed.*

## Monday 3 December

### EP SEMINAR

at 17.00 hrs – Auditorium

#### Drift chambers and cherry blossoms – experiments at the $e^+e^-$ collider TRISTAN in Japan

by Herbert BOERNER / CERN-EF

*The talk presents the design of the three experiments VENUS, TOPAZ and AMY. The inner detectors of VENUS and AMY will be described in some detail. Together with the physics issues, aspects of working and living in Japan will be discussed (with slides).*

## Tuesday 4 December

### CERN COLLOQUIUM

at 16.30 hrs – Auditorium

#### Achievements and prospects of the European Space Agency Scientific Programme

by R.M. BONNET / Scientific Director of ESA

## Thursday 6 December

### TIS SEMINAR

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

#### Report on 3<sup>rd</sup> European Conference on non-destructive testing

by M. BONA

## Friday 7 December

### COMPUTER SEMINAR

at 15.00 hrs – DD Auditorium  
(bldg. 31, 3<sup>rd</sup> fl.)

#### Graphics standards after GKS

by Richard F. PUK