

SEMINARS

SEMINAIRES

Monday 2 June

EF SEMINAR

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

Progress of the L3/BGO calorimeter

by M. SCHNEEGANS / CERN

The large high-performance electromagnetic calorimeter of L3 (~ 12000 BGO crystals, 1.6 m³ sensitive volume) has now moved from the stage of a project on paper to the component production stage. After the recall of some of the specific features of this calorimeter, the situation of crystal production, machining and reception tests will be reviewed. The present levels of performance, as measured in beams on test matrices, will be indicated.

Monday 2 June

PROTON SYNCHROTRON AND SYNCHRO-CYCLOTRON COMMITTEE

Open session

at 14.30 hrs - Council Chamber

1. Proposal : JETSET-Physics at LEAR with an internal gas jet target and an advanced general purpose detector (LAPP Annecy - CERN - Freiburg - Geneva - Genoa - Jülich - Oslo - Uppsala - Texas - Minnesota; PSCC/86-23/P97; 86-24/S97; 86-28/M262; J. Kirkby).
2. Status Report on experiment PS 195; Test of CP violation with neutral kaons (Athens - Demokritos - Basel - CERN - Fribourg - Liverpool - Saclay CEN DPhPE - SIN- Stockholm - Thessaloniki - Zurich; P. Pavlopoulos).
3. The muon spin rotation programme [Annual report of the muon spin research (muon spin rotation) at CERN]; CERN - Grenoble - Jülich - Leicester - Munich - Parma - Rutherford - Uppsala; PSCC/86-13/M254. Hydrogen mobility in disordered metals studied by muon spin rotation; Grenoble - Jülich - Uppsala; PSCC/86-15/P96; 86-16/S96; R. Wäppling).
4. ISOLDE proposals :
 - Nuclear ground state properties in strontium by fast beam laser spectroscopy (CERN - Hamilton - Leuven - Mainz - Montreal; PSCC/86-29/P98; 86-30/S98; F. Buchinger).
 - Nuclear structure of neutron-deficient rare-earth nuclei from Gamow-Teller decay spectroscopy (KFA Jülich - GSI Darmstadt - Strasbourg; PSCC/86-32/P99; 86-33/S99; P. Kleinheinz).

Closed session

Tuesday 3 June at 09.00 hrs in the 6th floor
Conference Room.

Monday 2 June

CAS ACCELERATOR SEMINAR

at 14.30 hrs - LEP Auditorium
last floor of bldg 30

Chaos in accelerators

by F. SCHMIDT / DESY, Hamburg

Nonlinearities such as high-order multipole fields due to magnet imperfections may lead to chaotic behaviour of particles in an accelerator. In order to study particle losses caused by this chaotic motion, long-time tracking has been performed for the proton ring of HERA using the RACE-TRACK code. The characteristic Lyapunov exponent is used to distinguish regular motion from chaotic motion. The motion can be visualised by looking at phase space plots at a certain observation point in the accelerator. A film will show the dynamical development of the motion in 2- and 4-dimensional phase space. Colour is used to get a feeling for the 4-dimensional phase space dynamics.

Monday 2 June

EP SEMINAR

at 16.30 hrs - Auditorium

Exploring the pomeron : pomeron-pomeron collisions at the CERN ISR

by M. DALLAVALLE / CERN

Proton-proton interactions which result in a central cluster of mass M_c and two quasi-elastically scattered protons are generally described by pomeron-pomeron scattering. A study of this process at ISR energies with the SFM is carried out. It is shown that the transverse component of the pomeron momentum accounts for :

- a. the production of high transfer momentum (up to 3 GeV/c) central particles,
- b. the low transverse momentum exponential behaviour of the transverse momentum distribution.

This can lead to an understanding of the phenomenon of pomeron exchange and gives a hint to reveal the role of partons in soft hadronic processes.

Tuesday 3 June

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs - Auditorium*

Superstrings : is that it ?

by D.V. NANOPOULOS / CERN-TH

Superstrings, extended one-dimensional objects, are purported to be the fundamental constituents of a consistent, unified quantum theory of all interactions including gravity. I shall discuss in a very simple way the basics of superstrings, the kind of theories emerging at low energies, the theoretical problems that they resolve, as well as their possible experimental and cosmological consequences.

* Tea and coffee will be provided at 16.00 hrs.

Wednesday 4 June

PS SEMINAR

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

JETSET : a novel technique to use antiprotons in LEAR

by Mario **MACRI** / INFN

New physics possibilities are opened by the study of the antiproton-proton annihilations in the collisions of the antiproton beam coasting in LEAR on an internal gas jet target. The high luminosity obtained from a small interaction volume will allow us to perform a detailed study of low cross-section processes which single out the role of hard gluons in the intermediate state and are good candidates to evidence a spectrum of new resonances which are predicted in models stemming from QCD. A high technology final state detector based on silicon microstrips and a Ring Imaging Cherenkov counter of new design will offer high spatial resolution and a fast kaon-pion discrimination at the MHz level. The physics, the technique and the detectors will be presented.

Wednesday 4 June

THEORETICAL SEMINAR

at 14.00 hrs - TH Conference Room

The physics of low and medium energy antiprotons

by J.M. **RICHARD** / ILL Grenoble

We review briefly the first achievement of LEAR and present the prospects associated with improved anti-proton sources and increased energies as in the super-LEAR projects of Fermilab and CERN. We summarize the discussion of the recent Fermilab workshop covering in particular : gluonium and hybrid productions, charmonium physics, new CP tests, nuclear physics, gravity experiments and bottled antiprotons.

Wednesday 4 June

DD SEMINAR

at 16.00 hrs - Council Chamber
PLEASE NOTE UNUSUAL PLACE

MINT : the electronic mail interchange project

by Denise **HEAGERTY** / CERN-DD

Electronic mail has been available at CERN for many years. However, the destinations which could be reached depended on the mail system you were using. Over the past year connectivity between the mail systems has been rapidly growing, allowing mail to be sent freely within and outside the CERN site. This seminar describes the facilities now available at CERN, takes a brief look behind the scenes at how they work and discusses plans for the future. Members of the DD Division involved in the project will be available to answer any questions.

Jeudi 5 juin

PRESENTATION TECHNIQUE

à 09.00 h - Amphithéâtre DD
bât. 31, 3-005

INTEL (USA/F) propose un séminaire sur le thème du MULTIBUS II, nouveau standard de BUS développé par Intel. De nombreuses applications industrielles ou commerciales nécessitent aujourd'hui l'utilisation d'unités centrales très performantes dans un environnement multiprocesseurs efficace. Les unités centrales 32 bits architecturées autour du MULTIBUS II offrent ces possibilités. Seront présentées les spécifications de ce BUS, ainsi que différents produits aujourd'hui disponibles.

Langues : français (anglais si nécessaire)

Renseignements : M. Diraison / FI / 4585

Jeudi 5 juin

PRESENTATION TECHNIQUE

de 09.00 à 12.00 h- Amphithéâtre LEP
bât. 30, dernier étage

MEKTRON (B), représenté par ARP (CH) propose un séminaire sur sa gamme de produits de barres de distribution d'énergie pour armoires, racks et circuits d'imprimés, ainsi que les claviers plats tactiles et non tactiles. Ces barres de distribution d'énergie, construites en technique multicouche, possèdent une capacité élevée répartie sur toute la longueur alliée à une faible inductance. Les Bus-Bars Mektron permettent de distribuer des courants importants, avec une tension précise, reproductible, protégée des bruits parasites et répondant aux exigences transitoires des systèmes.

Langues : français

Renseignements : M. Diraison / FI / 4585

Thursday 5 June

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs - Auditorium*

The evidence for neutral B particle mixing in the UA1 experiment

by K. **EGGERT** / Aachen

Dimuon events, observed in the UA1 experiment at the CERN proton-antiproton collider contain a large fraction of like-sign muon pairs. The interpretation of the data in terms of heavy flavour production will be discussed, including the possibility that there is a contribution from neutral B particle mixing.

* Tea and coffee will be provided at 16.00 hrs.

Monday 9 June

EF SEMINAR

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

Electron drift in room temperature liquids

by D. **SCHINZEL** / CERN

Relevant quantities for room temperature liquids are discussed. Electron lifetimes and their relation to absorption cross-sections are shown. Measured electron yields are compared to Ousager's theory.

Mardi 10 juin

FORUM ATARI

à 14.00 h - Salle de conférence EF
bât. 13,2-005

Présentation du 520ST, 1040SP, disque dur et autres périphériques, ainsi que de logiciels plus importants comme compilateurs, communications, transfert de données, etc. Possibilité d'utiliser les différentes machines et logiciels sur place.

Renseignements : F. Saldana / EP / tél. 6256/13-7030

Wednesday 11 June

INFORUM VME

at 09.00 hrs - EF Conference Room
bldg 13, 2-005

FORCE COMPUTERS present : product updates, 68020 implementation. Round table.

Information : F. SALDANA / EP / tel. 6256/13-7030

TRAINING AND EDUCATION ENSEIGNEMENT

ENSEIGNEMENT GENERAL Tél. 2844

Jeudi 5 juin

de 13.00 h à 13.30 h - Amphithéâtre

Science pour tous

par R. CARRERAS

Mardi 3 juin

LES SCIENCES AUJOURD'HUI

à 20.00 h précises - Auditorium
(jusqu'à environ 22.00 h)

par R. CARRERAS

Rafel Carreras, responsable du programme d'Enseignement général au CERN, commentera 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 utilisés afin que les explications et les commentaires soient accessibles aux personnes n'ayant pas de formation scientifique.

Entrée libre

(Please note that the lecture will be given in FRENCH)

Service des Relations Publiques
Tél. 2722

Wednesday 11 June

DD SEMINAR

at 16.00 hrs - DD Auditorium
bldg 31, 3-005

Distributed programming with remote procedure calls

by Krzysztof KOSTRO / CERN-DD and
CERN-SPS

Friday 13 June

CAS ACCELERATOR SEMINAR

at 14.30 hrs - LEP Auditorium
top floor of bldg 30

Prospects of gyro-devices as very high power microwave sources

by M.Q. TRAN / Centre de Recherches en
Physique des Plasmas, Lausanne

ACADEMIC TRAINING Tel. 2844-3364

9, 10 and 11 June

11.00 to 12.00 h - Auditorium

Collider physics

by G. ALTARELLI / University of Rome

The purpose of this course is to give an up-to-date overview of the main physical results which have been learnt from the Collider experiments at CERN. The near future perspectives both at CERN and at the Fermilab Tevatron will also be discussed. The main emphasis will be on new results both in theory and experiment, while more established subjects will be concisely summarized.

INFORMATIONS GENERALES GENERAL INFORMATION

RESEAU TELEPHONIQUE SPS

**zones LSS4 = BA4-BB4 et le sextant 4, etc.,
LSS5 = BA5-BB5 et le sextant 5, etc.**

Nous devons effectuer la réparation d'un câble de 80 paires. Les 75 téléphones concernés seront interrompus, l'un après l'autre et pendant environ 15 minutes, entre le 2 et le 5 juin.

Division ST/EL-CD
Tél. 4902-2227