

SEMINARS SEMINAIRES

Monday 3 June

EF SEMINAR

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

The SPS – Recent performance and future use

by W.C. MIDDELKOOP / CERN

The recent performance of the SPS in the normal and the pulsed collider mode will be discussed. Its future use for the acceleration of oxygen ions and as an $e^\pm$ injector for LEP will be described.

Monday 3 June

PROTON SYNCHROTRON AND SYNCHRO-CYCLOTRON COMMITTEE

Open session

Monday 3 June

at 14.30 hrs – Council Chamber

1. Information from the Chairman
2. Proposal : High-precision direct mass determination of unstable isotopes (CERN-Mainz-Montreal; PSCC/85-31/P84; 85-32/S84; H.-J. Kluge).
3. SC and PS Coordinators' reports (B. Jonson, U. Gastaldi).

Closed session

Tuesday 4 June

at 09.00 hrs – 6th floor Conference Room, Main Building.

Tuesday 4 June

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

The first direct observation of beauty decays

by Paul MUSSET / CERN

An associated production of a $B-B^0$ pair has been observed in an emulsion target inserted in an array of microstrip silicon detectors. Both B -particles decay into charm particles, which in turn decay in the emulsion. The event is selected by a high transverse momentum $p_T = 1.9$ GeV/c muon associated to a B^- decay. A second muon, $p_T = 0.45$ GeV/c, is associated to a charm decay. Both muons are measured in a large muon spectrometer placed downstream an iron-tungsten dump. The alternative interpretations of this event have negligible probability. Flight times of the two beauty particles will be given.

* Tea and coffee will be provided at 16.00 hrs.

Wednesday 5 June

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Hadron masses in quenched QCD

by C. REBBI / CERN

The talk reports on the results of a recent numerical calculation of hadronic masses and quark condensate on a large lattice ($16^3 \times 32$), in the quenched approximation to QCD. Methods of calculation, approximations, possible sources of errors are discussed. Within the expected level of accuracy (about 10%), the results are in very good agreement with experimental data. Numerical calculations for quenched QCD with errors of the order of a few per cent are foreseeable for the near future.

Mercredi 5 Juin

SEMINAIRE LEP

à 14.30 h – Amphithéâtre LEP

(bât. 30, dernier étage)

Les convertisseurs de puissance à thyristors

par A. BEURET / LEP-PC

Des convertisseurs de puissance à thyristors seront utilisés pour l'excitation d'une partie du système magnétique du LEP. Les composants électrotechniques des convertisseurs, leurs organes de commande et de mesure ainsi que leur régulation, seront décrits dans le cadre de convertisseurs équipant les bancs de mesures magnétiques. Les principes de construction des convertisseurs d'une puissance comprise entre 50 kW et 250 kW devant servir pour la phase initiale et la phase 100 GeV du LEP seront également présentés.

Jeudi 6 Juin

SEMINAIRE TIS

à 14.30 h – Salle de Conférence du PS

(bât. 6, 2-024)

Maladies professionnelles au CERN

par le Dr. J.-P. DISS

Les maladies professionnelles sont représentées par des affections qui s'établissent progressivement en rapport avec une exposition habituelle à un risque ou à une nuisance précise connus pour être en mesure de provoquer une maladie bien déterminée.

Beaucoup de législations nationales ont élaboré des critères précis pour définir les maladies professionnelles. Après avoir brièvement passé en revue l'état de la réglementation au CERN, un aperçu sera donné sur de diverses affections jusqu'à présent considérées comme d'origine professionnelle au sein de l'Organisation.

Les questions relatives à la réparation du préjudice subi, et surtout à la prévention, seront ensuite abordées, car de cette dernière dépend en grande partie l'évolution future de ce type de pathologie.

Friday 7 June

PRESENTATION

from 10.00 to 12.30 and from 14.00 to 15.00 hrs

DD Amphitheatre, (bldg. 31, 3-005)

Texas Instruments and Artificial Intelligence

by Dave ANTCLIFFE / Texas Instruments

In 1978, the Texas Instruments Board agreed that resources should be made available to make advances at the

corporate level into artificial intelligence. The initial work of this research group covered : natural language, smart computer-based learning, speed recognition, text understanding, advanced H/W design, programming environment.

This research has been applied by the different divisions within Texas Instruments. The aim of this presentation is to show the results of this application. These products cover natural language interface building tools, Expert System development tools and scientific applications.

Texas Instruments' association with MIT, has resulted in the announcement recently of a specialised LISP machine, named Explorer. The details of this machine and its development environment will be presented.

10.00 to 12.30 hrs

1. An overview of Texas Instruments and Digital Systems Division
2. The commercial computing products of TI
3. Artificial intelligence at TI
 - past, present and future
4. Available artificial intelligence products from TI
 - natural language interfaces to data bases
 - personal consultant - Expert System development tool
 - Arborist - decision tree tool
 - Explorer hardware and software (this will be covered by a member of TI's specialist team in Artificial Intelligence).

14.00 to 15.00 hrs

5. Demonstrations of TI's Artificial Intelligence Products
6. Questions and answers.

Monday 10 June

EF SEMINAR

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

Search for gravitational waves

by Edoardo AMALDI / University of Rome

After recalling the main lines of the derivation of the existence of gravitational waves from the equations of General Relativity made by E. Einstein in 1916, the speaker will summarize their most relevant properties, in particular the mechanisms involved in their emission and detection.

The rest of the seminar will concern the two types of detectors that have reached today a rather advanced stage of development : laser interferometers and resonant bars.

As a conclusion the sensitivity reached today will be given.

Tuesday 11 June

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium

W and Z in UA2

by Livio MAPELLI / CERN

Mercredi 12 Juin

SEMINAIRE LEP

à 14.30 h – Amphithéâtre LEP
(bât. 30, dernier étage)

Géodésie du LEP : Principes et comparaison des mesures terrestres et spirales

par M. MAYOUD / CERN-LEP

Thursday 13 and Friday 14 June

SEMINAR ON GAS SYSTEMS

Open Meeting

CERN is holding an Open Meeting on current developments in the gas systems required for large experiments. Participation is welcome from all interested physicists and engineers both at CERN and from other institutes.

Thursday 13 June

at 14.00 hrs – DD Conference Room
(bldg. 31, 3-005)

Effects of impurities on detector performance

Purification methods

Mixing techniques

Multichannel distribution systems

New streamer chamber gas mixtures.

Friday 14 June

at 09.00 hrs – DD Conference Room
(bldg. 32, 3-005)

Primary gas supplies

DESY gas systems

The ALEPH TPC gas system

UA1 gas systems

Applications of microprocessor control

Safety in design and operation

Please contact F. BONAUDI, tel 5847, or R.C.A. BROWN, tel. 5851 to confirm

- your attendance

- your intention to contribute on these (or other) topics.

TRAINING AND

EDUCATION

ENSEIGNEMENT

ENSEIGNEMENT GENERAL

Tél. 2844

Jeudi 6 juin

de 13.00 h à 13.30 h – Amphithéâtre

Science pour tous

par R. CARRERAS