

SEMINARS SEMINAIRES

Monday 18 December

CERN COLLOQUIUM

at 16.30 hrs – Auditorium*

Experiments with an isolated subatomic particle at rest

by Hans G. DEHMELT, Nobel Prize for Physics 1989 / University of Washington, Seattle

* Tea & coffee will be served at 16.00 hrs.

Wednesday 20 December

PRESENTATION

at 10.00 hrs – DD Auditorium
bldg 31, 3-005

User Interface Management System for modern workstations

by Peter BENGTSON / Telelogic, Linköping

TeleUSE is a User Interface Management System, a set of powerful tools to develop user interfaces on modern workstations. The system permits the separation of a user's application code from the interactive interface. This speeds up prototyping, facilitates customization and enhances the portability of the application.

Wednesday 20 December

EP SEMINAR

at 16.30 hrs – Auditorium

First measurement of limits on non-diagonal lepton pairs at high q^2 involving tau leptons

by C.A. HEUSCH / University of California, Santa Cruz

Lepton flavor conservation is an integral part of Standard Model phenomenology. A potential breakdown would most likely occur at high momentum transfers, and in processes involving third-family leptons. A first test on $e^+e^- \rightarrow e\tau$ was performed with MARK II data at $\sqrt{s} = 29$ GeV, leading to significant new limits not otherwise available. Event selection and data analysis will be discussed, and a brief interpretation of the results will be put in the framework of other processes.

Monday 8 January

EP SEMINAR

at 16.30 hrs – Auditorium

Tau physics at a Tau-Charm Factory

by J. J. GOMEZ-CADENAS / Santa Cruz IPP & IFIC Valencia

The Tau-Charm Factory is a proposed new e^+e^- collider, able to operate in the energy range of 3 to 4.2 GeV at a luminosity of $10^{33} \text{ cm}^{-2}\text{s}^{-1}$. This luminosity yields typical rates of the order of 10^7 pairs per year. This high statistical samples, together with a state-of-the-art, high precision detector will allow a much better understanding of the tau lepton than at present. In this talk we present the most relevant tau physics experiments that can be performed in the tau-charm factory. We show that the limits on the neutrino mass can be reduced to the order of 2 MeV. We discuss our technique to measure the tau branching fractions in an unbiased, background-free way, yielding to precisions that will allow the test of the radiative corrections to the decays $\tau \rightarrow e(\mu)\nu\nu$, $\tau \rightarrow \pi(K)\nu$. We discuss the determination of the weak current in the tau-neutrino-W vertex. Finally, we discuss the sensitivity that can be reached for some of the most relevant rare tau decays. We emphasize how these experiments can lead to possible 'new physics' in the tau sector.

Wednesday 10 January

COMPUTER SEMINAR

at 16.00 hrs – Auditorium

Mach : technical innovations & key ideas

by Daniel P. JULIN / Carnegie Mellon University

TRAINING AND EDUCATION ENSEIGNEMENT

ENSEIGNEMENT GENERAL

Tél. 2844-5811

Jeu di 21 décembre

de 13.00 h à 13.30 h – Amphithéâtre

Science pour tous

par R. CARRERAS

Reprise des cours le 11 janvier.

ACADEMIC TRAINING

Tél. 2844-3674-3364

18, 19, 20, 21 & 22 December

11.00 to 12.00 hrs – Auditorium

Differential algebra and its use in accelerator theory

by M. BERZ / Lawrence Berkeley Laboratory

15, 16, 17, 18 January

11.00 to 12.00 hrs – Auditorium

New physics at LEP and future machines

by R. BARBIERI / Scuola Normale Superiore,
Pisa

*I discuss the main predictions yet to be tested of the
standard model :*

- i) the existence of the top quark*
- ii) the existence of the Higgs boson*
- iii) a strict Cabibbo-Kobayashi-Maskawa picture of
flavour physics*

*I survey the general problems encountered where one
looks beyond the standard model physics.*

*I describe the experimental signatures of the possible
extensions of the standard model, with special
emphasis on supersymmetry.*

1989-1990 ACADEMIC TRAINING PROGRAMME

2nd TERM

15, 16, 17 & 18 January

11.00 to 12 hrs – Auditorium

New physics at LEP and future machines

by R. BARBIERI / Scuola Normale Superiore,
Pisa

12, 13 & 14 March

11.00 to 12.00 hrs – Auditorium

Topology in contemporary mathematical physics

by M. ATIYAH / University of Oxford

5, 6, 7 & 8 February

11.00 to 12.00 hrs – Auditorium

Elementary introduction to strings

by S. FERRARA / CERN-TH

19, 20 & 21 March

11.00 to 12.00 hrs – Auditorium

**Radiation risk – past experience and future
trends**

by W. JACOBI / GSF, Institut für
Strahlenschutz, Neuherberg

14, 15 & 16 February

11.00 to 12.00 hrs – Auditorium

Design of LHC

by J. GAREYTE / CERN-SPS

26, 28, 29 & 30 March

11.00 to 12.00 hrs – Auditorium

Physics of B-mesons and B-meson factories

by K.R. SCHUBERT / University of Karlsruhe

19, 20, 21, 22 & 23 February

11.00 to 12.00 hrs – Auditorium

Non accelerator physics

by B. DEGRANGE / Ecole Polytechnique,
Palaiseau

The lectures are open to all those interested, without application.

*The abstract of the lectures, as well as any change to the above information (title, dates, time, place, etc.), will be
published in the CERN Bulletin and by Notices before each series of lectures.*

Secretariat : tel. 2844-3674-3364

SERVICE D'APPUI LINGUISTIQUE LINGUISTIC SUPPORT SERVICE

Secrétariat (après-midi seulement) : 31.27
Secretariat (afternoon only) : 31.27

FRENCH COURSES

Next term : 15 January to 6 April 1990

Applications forms are available in building 54, ground floor (Education Services) opposite office R.001.

These courses are open to all persons working on the CERN site, and to their spouses.

1. General language courses : 3 to 7 hours a week according to student need and level (9 levels).

2. Written French : 2 hours a week (1 courses)

89FR1E : Spelling and grammar (exercices, dictation of letters, etc.) course for non-native speakers having a good level of oral expression.

N.B. For the written French course write the code 89FR1E under the heading "Remarks" of the application form.

Further information about the courses can be obtained from the Language Courses Secretariat : Building 54, Office R.001, tel. 3127 (afternoons only).

COURS D'ANGLAIS

Il reste quelques places disponibles pour les cours d'anglais du prochain trimestre (du 15 janvier au 6 avril 1990).

Si vous êtes intéressé(e) veuillez contacter immédiatement :

Ulrich LIPTOW, Bât. 54-R-027, tél : 2957

INFORMATIONS GENERALES GENERAL INFORMATION

RESTAURANTS

Fermeture de fin d'année

En raison de la fermeture du CERN pendant les fêtes, les restaurants seront fermés à partir du vendredi 22 décembre 1989 :

dès 18.00 h (restaurants no 2 et 3)
dès 20.00 h (restaurant no 1)

La réouverture des restaurants aura lieu le mardi 2 janvier 1990 aux heures habituelles.

Sondage

Un sondage d'opinion a été effectué le mercredi 22 novembre 1989 auprès des clients des trois restaurants.

Nous tenons à remercier tous ceux qui ont accepté de remplir le questionnaire.

Les réponses sont en cours de dépouillement, et feront l'objet d'une analyse. Une information sera publiée ultérieurement à ce sujet.

Comité de Surveillance des Restaurants
Tél. 4469

RESTAURANTS

Holiday schedule

In view of the closure of CERN for the Christmas and New Year holidays, the restaurants will be closed from Friday 22 December 1989 :

from 18.00 hrs (Restaurants 2 and 3)
as from 20.00 hrs (Restaurant No. 1)

The restaurants will re-open at the usual time on Tuesday 2 January 1990.

Opinion survey

An opinion survey was conducted in the three restaurants on Wednesday 22 November 1989.

We should like to thank all those who completed the questionnaire.

The replies are being analysed at present, and further information will be published in due course.

Restaurant Supervisory Committee
Tel. 4469