

RAPPEL

ENFANTS DES MEMBRES DU PERSONNEL DU CERN NON FRANCAIS RESIDANT EN FRANCE

Les membres du personnel du CERN non français résidant en France dont les enfants, âgés de moins de 16 ans, n'ont pas droit à un document de légitimation délivré par le Ministère (français) des Affaires étrangères ou à une carte de séjour délivrée par la Préfecture, sont priés de prendre note de l'arrangement local suivant, passé avec les autorités françaises :

Lorsqu'un enfant franchit la frontière, il lui est demandé d'être muni, non seulement de son passeport ou de sa carte nationale d'identité, mais également d'une photocopie de la carte de légitimation en cours de validité de son parent membre du personnel du CERN.

Relations avec les Pays-hôtes
Tél. 5152

REMINDER

CHILDREN OF NON-FRENCH MEMBERS OF THE CERN PERSONNEL RESIDENT IN FRANCE

Non-French members of the personnel at CERN resident in France with children under the age of 16, who are not entitled to a legitimation document issued by the French Ministry of Foreign Affairs or to a residence permit from the prefecture, should take note of the following local arrangement with the French authorities :

When a child crosses the border, he/she is required to carry not only his/her passport or national identity card, but also a photocopy of the valid 'carte de légitimation' of the parent who is a member of the CERN personnel.

Relations with the Host States
Tel. 5152

SEMINARS SEMINAIRES

Monday 21 June

DETECTOR SEMINAR

at 11.00 hrs – ECP Conference Room
bldg 13/2-005

Beam test results of electro-magnetic calorimeter prototypes for LHC

- New heavy scintillating crystals (PbWO_4)
- "Accordeon" type structure with wave length shifter fiber readout

by Vassili KATCHANOV and
Alexander SINGOVSKI / IHEP, Protvino

Further investigations of heavy scintillating lead tungstenate crystals, PbWO_4 , have been performed at IHEP, Protvino, Russia and INP, Minsk, Belarus. During the last few months, the technology of growing large PbWO_4 crystals (up to 25 radiation lengths) has been successfully developed in a factory with high production capability in Russia. More than 30 crystals have been grown and tested and finally 220 mm long crystals with good transparency have been obtained. Four crystals have been used for the beam tests of the EM-calorimeter prototype. EM-shower profile, transparency, energy and coordinate resolution have been measured at 4, 9, 17 and 26 GeV electron beams.

A new EM-calorimeter prototype consists of the "accordeon"-like lead-scintillator structure with fiber readout. A high photon number for the pair scintillator/wave length shifter fiber (35 photons/mm) has been obtained for minimum ionizing

particles. The number of photoelectrons obtained by FEU-84 photo-multiplier on the EM-shower detection is 2540 photoelectrons/GeV. The calorimeter's response uniformity is about 1.2%.

Monday 21 June

PPE SEMINAR

at 16.30 hrs – Auditorium

Does the present data say anything about the Higgs mass ?

by Manel MARTINEZ / CERN-PPE

The high precision Electroweak data presented at the Winter conferences is analysed in the minimal Standard Model framework to look for information about the Higgs mass. In this analysis, special attention has been paid to the proper combination with the direct search results, the use of the most up-to-date calculations, the propagation of the relevant theoretical uncertainties and the detailed study of the statistical significance of the behaviour of the χ^2 function. The expected evolution of this kind of indirect search in the coming years will also be discussed.

Tuesday 22 June

PRESENTATION

at 10.00 hrs – CN Auditorium
bldg 31/3-005

Catering for language and territory conventions in DB applications

by Kevin WHARTON / Director, National Language Support, Oracle Corp.

To maximise operability, data processing applications need to interact with end-users in their native language, and adapt to their specific cultural conventions for displaying data. Such features enhance the ease-of-use of applications, reduce the amount of training needed to learn how to use them, and improve the productivity of end-users. Oracle has developed a National Language Architecture that enables such features to be implemented with little additional complexity required from the application design, and which also caters for applications implemented in heterogeneous client/server environments. This presentation will describe in detail how the features provided by ORACLE7 can be utilized in designing such applications.

Wednesday 23 June

PS SEMINAR

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

The new ISOLDE facility at the PS Booster

by Bjorn JONSON/ Chalmers University,
Göteborg, Sweden

The new Isolde facility using the CERN PS Booster will be described. An overview of the main physics programme at the new Isolde given together with some results.

Wednesday 23 June

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Chiral fermions on the lattice: an everlasting illusion?

by Chris KORTHALS-ALTES / Marseille

Putting the standard model on the lattice remains a challenge, and highly desirable for the study of possibly non-perturbative effects (high-energy baryon number violation ...). We review some of the obstructions towards a lattice formulation of chiral fermions. There are essentially two strategies to circumvent them: start from a vector-like theory, and

- 1) try to give a big mass to the unwanted chiral partners
- 2) try to send the unwanted chiral partners behind the moon.

We briefly visit the graveyard, where most of these ideas rest. We will discuss in some detail the latest attempt in category 2, that of Kaplan.

Mercredi 23 juin

PRESENTATION TECHNIQUE

de 14.00 à 17.00 h – parking PTT, bât. 63

Démonstration de pompes à vide VACCUBRAND (D)

par E. MERCK (Suisse) SA
(D. Fuchs tél. 01 74 51 440)

Produits en démonstration :

- évaporateur rotatif, évaporateur concentrateur, lyophilisateur
- étuve à vide

- filtration sous vide et pression
- sécheur de gel

Les applications sont vastes et couvrent un domaine de vide de 2 mbar jusqu'à 10^{-4} mbar.

Langues : allemand, anglais et français

Renseignements : M. Diraison / FI-A / 4585

Wednesday 23 June

COMPUTING SEMINAR

at 16.00 hrs – CN Auditorium
bldg 31/3-005

Practical development using Oracle CASE tools

by Sue FOFFANO & Christophe DELAMARE /
CERN-MT

Oracle CASE has been used in the MT Division to develop the JMT (Job Management Toolkit) application. This application is used to manage services provided by the division such as workshop, drawing office and installation activities. The aim of the presentation is to share the experience gained using Oracle CASE tools with other DataBase developers. The following points will be covered :

- Analysis phase
- Entity-Relationship schema and subsequent table generation
- Function definition and subsequent module/form generation.

To illustrate some of the above points, an on-line demonstration will be given at the end of the presentation.

Jeudi 24 juin

COLLOQUE TECHNIQUE DU CCIP

de 9.00 à 12.15h et de 14.00 à 17.00h
Amphithéâtre AT, bât. 30, 7ème étage

Stratégies et solutions d'un grand donneur d'ordre (EDF), d'un fabricant (TELEMECANIQUE) et d'un installateur (SPIE TRINDEL) sur les systèmes de contrôle commande et les réseaux industriels

Le comité de Coordination des Contrôles Industriels de Processus (CCIP), vous propose d'assister à un colloque organisé par SPIE TRINDEL qui durera toute la journée du 24 juin et sera présenté par des ingénieurs des trois sociétés. Il s'adresse aux personnes ayant déjà de l'expérience dans le domaine des contrôles industriels et ne doit donc pas être considéré comme un cours d'introduction au sujet. Au programme: les systèmes de contrôle/commande, les réseaux et des exemples d'installations réalisées. Comme de coutume dans le CCIP, le colloque sera suivi d'un débat.

Le programme détaillé de la manifestation peut être obtenu chez Evelyne Delucinge
(Evelyne_Delucinge@MACMAIL) de préférence par courrier électronique.

Thursday 24 June

SEMINAR

Organized by the Center of Quantum Philosophy of Geneva (CQPG)*

at 12.00 hrs – TH Conference Room

Divisibility and the role of the observer in quantum physics

by Charles P. ENZ / Département de Physique Théorique, Université de Genève

Quantum theory puts an end to the age-old antinomy between geometers (Pythagoras, Descartes) and physicists (Leukipos, Democritos) concerning the divisibility of matter: the latter stops roughly at the proton radius $\sim 10^{-13}$ cm. But, surprisingly, this does not mean that the puzzles of quantum theory are to be looked for on the length scale of the elementary particles although, understanding Pauli correctly, the role of the observer might be particularly subtle there. It is mainly in atomic and even macroscopic physics that these puzzles surface in the form of the particle-wave duality and the "EPR paradox". It is in this realm that Bohr in 1954 introduced the notion of the "detached observer" which drew the immediate criticism of Pauli. But how about big quantum systems? And should consciousness enter the measuring process? Heisenberg was vague on this point. Pauli liked to compare the quantum observer with the alchemist in his laboratory and to draw an analogy with the observation of the unconscious. For him the unity of particle and wave as quantum object was a hint of a much deeper unity between matter and spirit in the sense of C.G. Jung.

* The CQPG aims to promote the discussion on the philosophical and scientific challenges raised by the interpretation of quantum theory and of information theory, and particularly by the principles of nonlocality, indeterminism and undecidability. The CQPG addresses itself to people who think that quantum theory is not only a practical summary of mathematical recipes, but that it is now an integral part of knowledge and culture.

Friday 25 June

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

What is causing the excess of events in double beta decay?

by Cliff BURGESS / McGill University, Montreal

The experimental evidence for and against the existence of excess events near, but below, the endpoint of the electron spectrum for double beta decay is briefly reviewed, followed by an analysis of the kinds of physics which might be responsible. It is argued that there are two broad classes of models which can describe the experiments, and that essentially all of the models proposed to date fall into only one of these categories. The new class of possible decays do not require the same scalar fine tunings that arise in existing models. It is shown how the two classes may be distinguished from one another experimentally, and representatives from each class are constructed.

Monday 28 June

PPE SEMINAR

at 16.30 hrs – Auditorium

Precision measurement of $\Gamma(b\bar{b})/\Gamma(\text{had})$ from ALEPH

by Elizabeth MANNELLI / INFN Pisa (ALEPH Collaboration)

Results from the ALEPH experiment for the branching fraction of $Z \rightarrow b\bar{b}$ relative to all hadronic decays of the Z are presented. These results exploit leptons, event shape variables and large impact parameter charged tracks as signatures of beauty.

Tuesday 29 June

LEP EXPERIMENTS COMMITTEE

at 09.00 hrs – Auditorium

Open session

09.00–09.25 Report on LEP operation (S. Myers)

09.25–09.40 Report from SLC (M. Breidenbach)

Status Reports on the Experiments

09.40–10.00 L3

10.00–10.20 OPAL

10.20–10.40 DELPHI

10.40–11.00 ALEPH

11.00–11.30 Coffee break

11.30–12.00 Proposal for a new vertex detector for ALEPH

12.00–12.30 Proposal for the DELPHI very forward tracker

12.30–13.00 Proposal for a synchrotron radiation test mask in DELPHI (G. von Holtey)

Closed session

at 14.00 hrs – 6th Floor Conference Room, Administration building

Tuesday 29 June

PRESENTATION

at 10.00 hrs – CN Auditorium
bldg 31/3-005

PowerPC and MC68060 by Motorola Inc.

Wednesday 30 June

COMPUTING SEMINAR

at 16.00 hrs – CN Auditorium,
bldg 31/3-005

The impact of information technology in the 1990's

by David NORRIS / New Delivery Technology Manager, Coopers & Lybrand, London