

d'actualité en liaison avec l'étude actuarielle au 1.1.1995. En effet, l'actuaire-conseil de la Caisse, le président du groupe de travail sur les questions actuarielles et l'administrateur ont été invités à participer au sein du TREF le 22 novembre à un échange de vues sur les résultats de la cette étude. Cette discussion a permis de procéder à un examen des points saillants relevés par l'actuaire : effets de la diminution des effectifs, effets de l'indexation différenciée des traitements et des pensions, effets des départs anticipés plus nombreux que prévu.

Le président du Comité de placement a commenté les résultats à fin octobre de la gestion des placements par les gestionnaires mandatés par la Caisse. Dans l'ensemble, sur les trois derniers mois, les résultats se sont améliorés par rapport aux mois précédents. Le Conseil d'administration a approuvé les directives de placements pour 1996, qui ne connaissent pas de changement par rapport aux directives en cours, mis à part le fait que le montant minimum devant être investi en francs suisses passe de 45 % à 50 %.

Il a pris position sur une demande de prestation bénévole et a délibéré sur le rôle qu'Internet pourrait jouer dans le cadre de la politique d'information de la Caisse.

Enfin, le Conseil d'administration a pris note avec regret du décès de M. S. Menazzi, bénéficiaire de pension.

consulting actuary, the chairman of the working group on actuarial matters and the administrator had been invited to take part in an exchange of views on the results of that review at the TREF meeting on 22 November. That discussion had made it possible to examine the salient points raised by the actuary: the effects of the reduction in staff numbers, of the different indexation of salaries and pensions and of the more numerous early departures than expected.

The chairman of the Investment Committee commented on the results achieved by the end of October in investment management by the managers appointed by the Fund. The overall results during the past three months had improved in relation to those of the previous months. The Governing Board approved the investment instructions for 1996, which were the same as the current ones, apart from the fact that the minimum amount to be invested in Swiss francs was raised from 45 to 50%.

It gave a decision on an application for an *ex gratia* benefit and discussed the part which the Internet could take in the context of the Fund's information policy.

Finally the Governing Board took note with regret of the death of Mr. S. Menazzi, pensioner.

SEMINARS SEMINAIRES

Vendredi 12 janvier

SEANCE D'INFORMATION

à 14.30 h – Amphithéâtre

Le projet LHC

par L.R. EVANS / Chef du projet LHC

Au cours de cette séance, destinée au personnel non scientifique, je présenterai en termes simples, les technologies utilisées et les défis à relever pour construire le LHC. J'expliquerai également, à cette occasion, comment nous entendons nous organiser pour mener à bien ce projet passionnant.

Langue: français

Monday 15 January

TECHNICAL SEMINAR

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

Viper, a tool for the visualisation of parallel program execution at run-time

by René SCHIEFER / CERN-ECP

Viper has been developed at CERN in collaboration with the Technical University of Eindhoven, the Netherlands, as a PhD subject. It has been used in conjunction with the Mona Lisa parallel programming paradigm for the investigation of parallelisation of an existing high energy physics software package. Currently, Viper is being integrated into the architecture of the testbed of the Macrame project. This

project investigates traffic patterns in large scale switching networks (up to 1000 nodes). There, Viper will be used for network monitoring and traffic pattern analysis. This talk will discuss the design issues of Viper, and its application areas.

Lundi 15 janvier

SEMINAIRE UMTF

14.00-16.00 – Amphithéâtre CN, bât. 31/3-004&5

Emacs pour débutants

par Philippe DEFERT / CERN

"Emacs" est l'un des éditeurs recommandés. Cette introduction couvrira les domaines suivants :

- la terminologie de base
 - comment exécuter une commande
 - comment insérer, effacer et changer du texte
 - comment effectuer une recherche de chaînes de caractères
 - comment manipuler des fichiers
 - quels sont les backups maintenus par emacs
 - comment revenir et corriger vos erreurs ou celles du système
- Ce séminaire sera donné en français.

Monday 15 January

PPE SEMINAR

at 16.30 hrs – Auditorium

A first look at neutrino events with the NOMAD detector

by Dario AUTIERO / CERN-PPE

The Nomad experiment is searching for neutrino oscillations in the CERN SPS wide band neutrino beam by looking for tau

neutrino appearance. The detector has taken useful data since June 1995. All the subdetectors have been working well and their performances will be described in detail. First measurements and comparisons between data and Monte Carlo will be shown for muon, electron and hadron production in neutrino interactions.

Tuesday 16 January

TECHNICAL SEMINAR

at 09.00 hrs – bldg 13/3-003

New TDC solutions as full digital CMOS devices

by Augustin BRAUN, MSC/Gleichmann Germany, representative BASIX AG Zürich

MSC/Gleichmann has been developing TDCs since 1990. The product range now consists of 3 general purpose TDCs (TDC 501, TDC2001, TDC 10000). Two principles of measurements are realised. One with a resolution of type. 220 ps and one with a resolution of 60 ps Multihit capability with a high double pulse resolution can also be achieved as a good differential non linearity. All components are fabricated in full digital CMOS Process. They have very low power consumption and need only one supply voltage. For special requirements that can not be fitted with the standard products, it is easily possible to make special TDCs based on one of the measurement principles. Because of this advantage MSC/Gleichmann is now developing the TDCs for the HERA-B experiment at DESY Hamburg and the HADES experiment at GSI Darmstadt.

The presentation will give an overview about the technical features of the TDCs MSC/Gleichmann can offer now (multi channel per chip, multihit capability, differential non linearity,...) and the possibilities of custom TDC developments and future TDC products.

This presentation will be given in English but questions and discussion in English and/or German are welcome

Language : English

Information : L. Abel / FI-A / 9561

Tuesday 16 January

TECHNICAL PRESENTATION

à 14.00 h – Amphithéâtre CN Auditorium, bât. 31/3-004&5

Circuits programmables Xilinx

par GILLES BENZONI / Ingénieur d'application, AVNET

Présentation des nouveaux produits XILINX (composants, applications et logiciel) par la société AVNET (distributeur XILINX FRANCE).

1) Evolution des familles existantes

- Familles 7000
- Familles 3000
- Familles 4000

2) Nouvelles familles

- Familles 5200 (low cost)
- Familles 8100 (mer de portes antifuse)
- Familles 9500 (FAST FLASH)
- Familles 6200 (coprocesseur reconfigurable)

3) Applications

- PCI / Plug & Play / PCMCIA
- Synthèse logique

4) Xact

- step version 6.0: simplicité et puissance

5) Conclusions

- Questions / réponses.

Information: P. BAEHLER / CN / 5016

S. BROBECKER / CN / 8693

Organisateur : S. Cannon / CN / 5036

Wednesday 17 January

LHCC REVIEW BOARDS (LCRB, LDRB, LERB)

Open session

at 09.00 hrs – Council Chamber

09.00 -09.30 RD2 Status Report: Study of a tracking/preshower detector for the LHC (Bern–CERN–Dortmund–Geneva–Hamburg–Melbourne–Moscow State–Oxford–RAL; LHCC 96-5/LERB Status Report/RD2; A. Clark).

09.30-10.00 RD20 Status Report: Development of high resolution silicon strip detectors for experiments at high luminosity at LHC (NCSR Demokritos–Bonn–Comenius–CERN–INP and IPNT Cracow–MPI Heidelberg–Liverpool–Brunel–Imperial College–CPPM Marseille–Oslo–SINTEF Oslo–Padova–Rome Sanita–RAL–CRN Strasbourg–Torino–Uppsala–HEPHY Vienna–PSI Würenlingen; LHCC 96-2/LERB Status Report/RD20; G. Hall).

10.00-10.30 RD19 Status Report: Development of hybrid and monolithic silicon micropattern detectors (CERN–Bonn–Collège de France–CPPM Marseille–Univ. of California Davis–Demokritos–Dortmund–ETH Zurich–Freiburg–Glasgow–IMEC Leuven–Imperial College–Bari–Catania–Genova–Milano–Modena–Padova–Perugia–Pisa–Roma–Trieste–Udine–NIKHEF–Group Praha–Uppsala–GHS Wuppertal–Canberra Semiconductor NV–GEC Marconi Materials Technology–Smart Silicon Systems SA; LHCC 96-3/LERB Status Report/RD19; E.H.M. Heijne).

10.30-11.00 RD27 Status Report: First-level trigger systems for LHC experiments (Birmingham–CERN–Heidelberg–Linköping–MPI Munich–Queen Mary and Westfield College–Royal Holloway and Bedford New College–La Sapienza Rome–Tor Vergata Rome–RAL–Stockholm–Wisconsin; LHCC 96-4/LERB Status Report/RD27; N. Ellis).

Wednesday 17 January

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Is there $N = 2$ light on QCD?

by Luis ALVAREZ-GAUMÉ / CERN

There has been recently a good deal of activity centred upon extended supersymmetric gauge theories and their couplings to supergravity. In this talk I will present some results in trying to extend the exact features of some of these solutions from $N = 2$ to $N = 0$ (i.e. real) QCD. Although we are still far from the supersymmetry decoupling limit, the results are encouraging.

Wednesday 17 January

COMPUTING SEMINAR

at 16.00 hrs – CN Auditorium, bldg 31/3-004&5

PCs as Physics Computer for LHC ?

by Sverre JARP / CERN-CN

In this presentation I try to show that ordinary PCs are now capable of doing the same work as RISC workstations. A project, active since March this year in the PDP (Physics Data Processing) group in CN will be described where PC's running Windows/NT have been used to create an environment for running physics jobs (initially LHC simulation jobs, but other applications are coming).

The problems encountered in porting both the CERN libraries and the specific HEP codes will be described together with the encouraging benchmark results compared to existing RISC workstations in use. Measurements of disk I/O and network speeds will also be reviewed.

A prototype environment, WISE/Batch (Windows/NT Integrated, Scalable Environment/Batch) is currently being established and the various aspects of setting up a full-blown batch environment, (Batch monitor, tape staging, etc.) will be dealt with. This part will also cover the integration with the Unix world.

Organiser : G.Folger / CN

Thursday 18 January

UMTF SEMINAR

10.00-12.00 – CN Auditorium, bldg 31/3-004&5

Introduction To Emacs

by Jan Hendrik PETERS / DESY

This lecture on the recommended editor emacs will cover the basic terminology, explain how commands are issued, and will show how to insert, delete and change text, how to search for strings, how to handle files and how emacs backups your work to help you to recover from your and system errors. This is a repeat of a lecture already presented last year by this speaker.

Friday 19 January

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

Cross section enhancement near threshold in hadroproduction phenomena

by Paolo NASON / CERN

It has been known for quite some time that the resummation of soft-collinear gluons in hadroproduction phenomena enhances the cross section when the threshold region is approached. This phenomenon has been extensively studied in Drell-Yan pair production and heavy flavour production. I will show that these resummation effects are in fact very small, and that they are negligible in most experimental configurations of interest. I will also show that the large resummation effects obtained in previous calculations are in fact almost exclusively due to the presence of spurious factorially growing subleading terms. Cross sections for Drell-Yan pair production, top and bottom production near threshold, and jet production at large transverse momenta are discussed.

Monday 22 January

DETECTOR SEMINAR

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

The Cryogenic Noble Liquid Detector: Recent developments and experimental results

by Giovanni CARUGNO / INFN Padua

A review on the recent development effort on this technique is given with emphasis on liquid purification, maintenance of purity, electron multiplication on tip, electron extraction from liquid and mobility measurement in a liquid mixture. Some preliminary data is then presented on two experiments using a self triggered liquid Xenon TPC (radiative pion decay) and a multi-electrode liquid argon ionization chamber for the double beta decay.

Monday 22 January

SPECIAL SEMINAR

at 11.00 hrs - Auditorium

Status of the SLAC-based B Factory

by Jonathan DORFAN / SLAC

Monday 22 January

UMTF SEMINAR

14.00-16.00 hrs – CN Auditorium, bldg 31/3-004&5

Basic Unix Commands / Unix File System

by Lionel CONS (en français)

Monday 22 January

CERN COMPUTING COLLOQUIUM

at 14.00 hrs* – Auditorium

Internet standards as exponential growth begins and ends

by Paul V. MOCKAPETRIS / Chairman of the Internet Engineering Task Force (IETF)

The conventional picture of Internet growth is a smooth exponential growth. A more realistic model is one in which a sequence of technological innovations make the Internet relevant to a sequence of markets. Today's internet is really a mixture of older, smaller markets which are near saturation, and newer, mass markets where Internet penetration has yet to begin.

The IETF is striving to tune its approach to standards to match this reality. This necessitates standards approaches which are appropriate for these new market, and diverge from the standards processes of the past.

* *Please not the unusual day and time*

Lundi 22 Janvier

PRESENTATION TECHNIQUE

14.00-16.00 h – bldg 4/S-013

Gamme de présentation concernant les pompes Turbo Edwards

par Dave GOODWIN / Grawley, London, UK

Tuesday 23 January

SPS AND LEAR EXPERIMENTS COMMITTEE

Open session

at 09.00 hrs – Auditorium

1. Status report for NA44: H. Bøggild.
2. Status report for WA97: E. Quercigh.
3. Status report for NA43/2: E. Uggerhøj.
4. Measurement of pion and kaon fluxes below 60 GeV/c produced by 450 GeV/c protons on a Beryllium target (the Secondary Particle Yields collaboration; SPSLC 96-01 / P294) : S. Ragazzi.
5. Status report for CRYSTAL BARREL: M. Fässler.
6. Status report for PS196: First observation of cooling of trapped protons with trapped electrons: G. Gabrielse.

Closed session

at 14.00 hrs, 6th floor Conference Room (to be continued on Wednesday 24 January at 09.00 hrs)

Tuesday 23 January

TECHNICAL PRESENTATION

at 10.00 hrs – CN Auditorium, bldg 31/3-004&5

Sony High Performance Data Storage

by Allan ARTHURS / Senior Manager: Data Storage Systems, Sony Broadcast & Professional: Europe

Organiser : S. Cannon / CN / 5036

Tuesday 23 January

ISOLDE SEMINAR

at 15.15 hrs – TH Conference Room

The GSI storage cooler ring – a powerful tool for mass spectrometry and the detection of exotic weak-decay modes

by Fritz BOSCH / GSI, Darmstadt

Tuesday 23 January

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

Neutrino Oscillations for the Non-Conformist

by D. PERKINS / Oxford University

Thursday 25 January

UMTF SEMINAR

10.00-12.00 – CN Auditorium, bldg 31/3-004&5

USERREG for group admins

by Genny FERRAN

1996 – UMTF COMPUTING TUTORIALS

In 1996, we will continue this series of Tutorials which has proved so successful thus far. Below you will find the subjects already arranged for the start of the year. In order to continue to schedule tutorials on the subjects you want, we have prepared a short questionnaire which we would like you to fill in and return to us. You will find a pointer to this questionnaire on the Training Page of the User Migration Task Force, at URL - <http://wwwcn.cern.ch/umtf/training/> Please help us by answering this questionnaire.

1996 Schedule

All seminars in English unless stated. Those courses given in French will often be based on overheads and handouts in English.
All seminars in CN Auditorium

Lundi 15 janvier

14.00-16.00 h

Emacs pour débutants

par Philippe DEFERT (en français)

Thursday 25 January

10.00 to 12.00 hrs

USERREG for group admins

by Genny FERRAN

Monday 5 February

14.00 to 16.00 hrs

UMTF User Meeting

Thursday 18 January

10.00 to 12.00 hrs

Introduction to Emacs

by Jan Hendrik PETERS

Monday 29 January

14.00 to 16.00 hrs

Basic Unix Commands / Jobs & Processes

by Lionel CONS (en français)

Thursday 8 February

10.00 to 12.00 hrs

Requesting or Modifying a Network Connection at CERN

by Jean-Michel JOUANIGOT

Monday 22 January

14.00 to 16.00 hrs

Basic Unix Commands / Unix File System

by Lionel CONS (en français)

Thursday 1 February

10.00 to 12.00 hrs

ORACLE pour piétons

par Geneviève FERRAN
(en français)

Monday 12 February

14.00 to 16.00 hrs

UNIX shell environment

Arnaud TADDEI (en français)