

CONSEIL D'ADMINISTRATION DE LA CAISSE DE PENSIONS

GOVERNING BOARD OF THE PENSION FUND

En date du 12 mai, le Conseil d'administration de la Caisse de pensions a tenu sa vingt-huitième réunion.

L'ordre du jour comprenait trois présentations orales. G. Maurin, président des groupes de travail sur l'étude actuarielle et sur le fonctionnement du Conseil d'administration et de ses organes, a fait le point sur l'avancement des travaux dans ces deux groupes. En ce qui concerne l'étude actuarielle, les premiers résultats sont attendus au début du mois de juin. Cette étude tiendra compte, entre autres choses, des nouvelles tables de mortalité, des frais de fonctionnement administratif maintenant à la charge de la Caisse, des rendements obtenus ces dernières années et des départs à la retraite prévus. En ce qui concerne le second groupe de travail, le rapport définitif du groupe a été finalisé et sera soumis pour examen et approbation à la prochaine séance du Conseil d'administration, le 17 juin.

Le Conseil d'administration a également entendu un rapport de l'Administrateur sur la politique de placement suivie depuis janvier. Il en ressort que la politique menée depuis plus d'une année, orientée sur la diversification des différents types de placement, porte ses fruits. Les résultats obtenus s'avèrent satisfaisants et s'inscrivent pour l'heure sur la même ligne que ceux de l'année passée.

Le Conseil d'administration a pris note avec regret du décès de deux bénéficiaires, MM. G. Toninato et R. Peche.

The Governing Board of the Pension Fund held its twenty-eighth meeting on 12 May.

There were three oral presentations on the agenda. G. Maurin, chairman of the working groups on the actuarial review and on the operation of the Governing Board and its committees, reported on progress in the work of both working groups. The initial results of the actuarial review are expected at the beginning of June. The review will take account, among other things, of the new mortality tables, the administrative operating costs now borne by the Pension Fund, of the returns obtained in recent years and scheduled retirements. The final report of the second working group has been finalised and will be submitted to the Governing Board for examination and approval at its next meeting on 17 June.

The Governing Board also heard a report by the Administrator on the investment policy pursued since January. The report showed that the policy implemented for over a year aimed at a diversification of the various types of investment is bearing fruit. The results obtained are proving to be satisfactory and for the moment are along the same lines as last year.

The Governing Board took note, with regret, of the deaths of two beneficiaries, G. Toninato and R. Peche.

SEMINARS SEMINAIRES

Tuesday 2 June

SPS AND LEAR EXPERIMENTS COMMITTEE

Open session

at 09.00 hrs – Auditorium

1. *Status Report on proposal P268: Proposal for a Strangelet and Particle Search in Pb-Pb Collisions (NEWMASS collaboration: Bern Univ. – CERN – LAPP, CNRS-IN2P3, Annecy-le-Vieux – Helsinki Univ. – Stockholm Univ.; SPSLC 92-16 / P268) : K. Pretzl.*

Closed session

at 10.00 hrs to be continued on Wednesday 3 June
at 09.00 hrs, bldg 33/R-009

Tuesday 2 June

PRESENTATION

10.00–12.00 hrs – CN Auditorium
bldg 31/3-005

Polycenter : Enterprise management from Digital
by Luc TIMMERMANS / System Management
Consultant, Digital Valbonne

More productivity for less manpower is a fundamental concern for managers of information technology resources. This is the aim of Digital's Polycenter solution which envisions an intelligent, self-managing environment, automating management tasks and minimising the need for operator intervention. Polycenter is a suite of management products and services from both Digital and Complementary Solutions

Organisations (CSOs). This portfolio provides both distributed and centralised computing management from datacentre to desktop. This presentation will describe the Polycenter product set, and explain its strategy for multivendor systems and network management. It will show the relationship with the Enterprise Management Architecture upon which it is based, and how it fits with Digital's overall NAS (Network Application Support) architecture.

Information : Tor Bothner / 5199 / bothner@dxcern

Tuesday 2 June

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

Recent results on τ physics from ARGUS

by Bernhard SPAAN / University of Dortmund

Using the ARGUS detector at the DORIS II storage ring, we have measured the mass of the τ lepton. From the analysis of the pseudo τ mass spectrum for τ decays of the type $\tau^- \rightarrow \pi^- \pi^+ \nu_\tau$ we find $m_\tau = 1776.0 \pm 3.2 \pm 1.2 \text{ MeV}/c^2$. This mass value represents an improvement of the upper limit on the mass of the τ neutrino to $m_{\nu_\tau} < 31 \text{ MeV}/c^2$ at the 95% confidence level. An analysis of the decay $\tau \rightarrow \pi^- \pi^0 \nu_\tau$ has been performed. The branching ratio has been determined to be $(22.6 \pm 0.4 \pm 0.9)\%$. The shape of the $\pi^- \pi^0$ invariant mass spectrum is found to be in excellent agreement with the predictions obtained using conserved vector current hypothesis. The analysis of the measured decay angular distribution of the pions with respect to the direction of flight of the $\pi^- \pi^0$ system demonstrates the vector nature of the coupling at the $\tau^- \nu_\tau$ vertex with one assumption of zero ν_τ mass the ν_τ spin has been determined to be 1/2.

* Tea & coffee will be served at 16.00 hrs

Mercredi 3 juin

PRESENTATION TECHNIQUE

10.00–17.00 h – Salle de conférence LEM
CTN, 18, ch. des Aulx, 1228 Plan-les-Ouates

Exposition et démonstrations portant sur :

- la microscopie et la stéréoscopie optique pour biologie, métallurgie, électronique, etc ...
- l'imagerie digitale
- des logiciels de mesure de dureté par analyse d'image
- une station automatique de mesure et de contrôle

Wednesday 3 June*

AC SEMINAR

at 11.00 hrs – SL Auditorium
bldg 864, 1st floor, Prévessin

Hydrodynamic calculations of high energy beam deposition

by Douglas C. WILSON / Los Alamos National Laboratory

The SSC and the LHC are planned to have beam energies of 400 to 600 MJ, equivalent to the energy contained in 100s kg of high explosive. The consequences of beam loss may be dramatic. The beam sizes are small enough and durations long enough that sometimes a static calculation is inadequate. At Los Alamos we are in the process of combining the Mokhov's MARS energy deposition code with Eulerian (MESA) and Lagrangian (SPH) hydrodynamic codes to calculate these situations. Preliminary results using the LASNEX hydrodynamic code show that dynamic effects may cause the beam to penetrate many times its static deposition range. Preliminary calculations for the LHC will also be shown.

* Please, note unusual day

Wednesday 3 May

PS SEMINAR

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

Office Local Area Network in the PS Division : present and future

by A. PACE / CERN–PS

The Office LAN in the PS Division has been in use since four years and counts over 300 users from more than 200 Olivetti personal computers, two servers with 1.5 Gbytes of disk space and over 30 network printers geographically distributed. The network with its shared resources (disks, printers, documents, databases) is also accessible from Macintoshes as an Appleshare server and from Unix workstations as a NFS server. The seminar will describe the different services that the office network provides inside and outside the division for the different platforms. The financial and manpower effort will be presented and the near future plans discussed.

Wednesday 3 June

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room
Time machines in 2+1-dimensional gravity
by E. FARHI / MIT

Wednesday 3 June

DETECTOR R & D COMMITTEE

Open session

at 14.00 hrs* – Auditorium

1. RD-14 Status Report: Liquid xenon (krypton) calorimetry (CERN–Univ. & LIP Coimbra–Collège de France–IHEP Serpukhov–Thessaloniki; DRDC 92-25; T. Ypsilantis).
2. RD-16 Status Report: A digital front-end and readout microsystem for calorimetry at LHC; (CERN–Linköping–Politecnico di Milano–Univ. & INFN Pavia–Manne Siegbahn Inst. of Phys. Stockholm–Fysikum Stockholm; DRDC 92-26; G. Goggi).
3. RD-20 Status Report: Development of high resolution

silicon strip detectors for experiments at high luminosity at LHC (CERN-INP & INPT Cracow-SEFT Helsinki-Liverpool-Imperial College London-CPPM Marseille-Univ. & SI Oslo-INFN Roma Sanità-RAL-LEPSI Strasbourg-INFN Torino-Uppsala-IHEP Vienna-PSI Villigen-Yale-Comenius-Brunel-INFN Padova; DRDC 92-28; G. Hall).

4. Proposal: NEBULAS: A high performance data-driven event-building architecture based on an asynchronous self-routing packet-switching network (CERN-Royal Inst. of Tech. Stockholm-Tampere Tech. Univ.-Lab. Instr. e Part. Lisbon-Tbilisi; DRDC 92-14/P36; M. Letheren).
5. Proposal: To develop a radiation hard microvalve amplifier and associated radiation detectors for experiments at the LHC (THORNEMICRL Hayes-CERN-RAL-Reading-Micron Semiconductor Lancing-Oxford; DRDC 92-23/P39; D.C. Young).
6. Proposal: Implementation of an ASP based machine in the data acquisition system of an R&D experiment at CERN (CERN-Univ. Paris-Sud Orsay-DAPNIA SEI Saclay; DRDC 92-27/P40; E. Augé).
7. Proposal: Development of gas micro-strip chambers for high radiation rate detection and tracking (CERN-Budker Inst. of Nucl. Phys. Novosibirsk-CRPP & Phys. Dept. Carleton Univ. Ottawa-ISA Aarhus-MPI Heidelberg-Texas A&M Univ.-TRIUMF Vancouver-Weizmann Inst. Rehovot; DRDC 92-30/P41; F. Sauli).
8. Proposal: A mixed analog-digital radiation hard technology for high energy physics applications: DMILL [Durci Mixte sur Isolant Logico-Linéaire] (CEA DSM DAPNIA Saclay-CEADTALETI Grenoble-CEADAM Bruyères la Châtel-Thomson TMS Grenoble-IN2P3 CPPM Marseille; DRDC 92-31/P42; M. Dentan).
9. Proposal: Development of a time projection chamber with high two track resolution capability for experiments at heavy ion colliders (LBL-GSI Darmstadt-IKF Frankfurt-CERN-MPI Munich-Weizmann Inst. Rehovot-BNL; DRDC 92-32/P43; R. Brockmann).

Closed session

Thursday 4 June

at 09.00 hrs in Salle B (1st floor, Main Building)

* Please note unusual time

Jeudi 4 juin

PRESENTATION TECHNIQUE

09.00-16.00 h - bât. 17/1-007

Carl Zeiss AG (D), propose en exposition démonstration l'ensemble de son programme d'instruments optiques :

- microscopes pour l'étude des surfaces et des matériaux
- microscopes stéréoscopiques
- accessoires pour la microscopie : photographie, vidéo, microduromètre, micrométrie
- spectromètre multicanal pour les mesures de réflexion et l'épaisseur des couches minces transparentes

- interféromètre de surface en temps réel direct 100
- profilomètre optique sans contact
- instruments de géodésie pour la mensuration et l'alignement

Langues : allemand, anglais, français

Renseignements : M. Diraison / FI / 4585

Thursday 4 June

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs - Auditorium*

Direct Photon Physics in UA2

by Fernanda PASTORE / Dip. Fisica Nucleare e Teorica & INFN, Pavia

We present a study of direct photon production based on data from pp collisions at $\sqrt{s} = 630$ GeV. The inclusive cross-section for events with one or two photons in the final state is measured and found in good agreement with the predictions of perturbative QCD. The photon angular distribution in events containing a high transverse momentum photon and a jet is studied and compared with QCD expectations. Furthermore the study of such events offers a unique tool to determine the gluon momentum distribution $G(x)$ inside the proton. A measurement of this distribution has been performed and the results are presented together with theoretical expectations.

* Tea & coffee will be served at 16.00 hrs

Friday 5 June

CES RIO/MIO COURSE

at 09.00 hrs - CN Auditorium

bldg 31/3-005

Creative Electronic Systems SA will give a one day course on the hardware and software aspects of their RIO8260 and MIO8261 RISC-based, intelligent I/O modules, for users and prospective users, as follows:

09.00-10.00 Introduction and overview (J. Bovier)

10.00-12.00 Hardware aspects (P. Cristin)

14.00-16.00 Software aspects (S. Beaussault)

16.00-17.00 Discussions, questions, etc.

Information : Chris Parkman / ECP / pmn@cernvm

Friday 5 June

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs - TH Conference Room

The structure of the pomeron

by P.V. LANDSHOFF / CERN

The phenomenology of pomeron exchange, which controls total hadronic cross-sections, elastic scattering and diffraction association, is surprisingly simple and has resulted in several successful predictions. Among these are the size of the total

cross-section and the shape of the forward elastic-scattering peak at Tevatron energy, and the pomeron structure function recently measured at the CERN collider.

Tuesday 9 June

LEP EXPERIMENTS COMMITTEE

Open session

at 09.00 hrs – Main Auditorium

09.00 - 09.30 *Report on LEP*

Status Reports on the Experiments

09.30 - 09.50 *OPAL*

09.50 - 10.10 *L3*

10.10 - 10.40 *Coffee Break*

10.40 - 11.00 *ALEPH*

11.00 - 11.20 *DELPHI*

11.20 - 11.50 *Background Studies for LEP200 (G. von Holtey)*

11.50 - 12.20 *An Upgrade of DELPHI in the Forward Region (LEPC 92-5/I 11)*

12.20 - 12.50 *Proposal for the Replacement of the Very Forward Calorimeter of DELPHI (LEPC 92-6/P2 Add. 1)*

Closed session

on 9 June, at 14h.00, Salle B (Main Building, bldg 61, 1st floor)

Tuesday 9 June *

COMPUTING SEMINAR

at 10.30 hrs – Council Chamber, bldg 503

Exactly what is a computer virus ?

by Eugene H. SPAFFORD / Purdue University

Organizers : N. Cremel (CN), A. Silverman (CN)

* Please note unusual day, time and place!

Wednesday 10 June

PRESENTATION

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

Document Management based on Imaging Technology

by Paul HENNESSEY / Systems Integration
Business Manager, Oracle Corporation

Intelligent document management by computer using the latest imaging technologies can provide major benefits for large organizations in terms of cost savings, improved quality, and reduced clerical effort. By integrating access to all project data whether in the form of paper, faxes, drawings or computer based files, end-users from many different areas are presented with timely, accurate and consistent information. The

presentation highlights the main driving forces behind the introduction of image technology, and the difficulties that have to be overcome in order to achieve successful implementation. The primary requirements of a "workflow management" system are identified, covering case-folder management, rules-based processing, information transfer, workload management and management information handling. The major components of an Oracle-based imaging system are discussed, showing how the system can be used in a distributed environment and integrated with existing systems. The talk concludes with some examples of Oracle's experience of implementing integrated image solutions in various business sectors including Engineering, Government, Finance, Law Enforcement.

Organiser: G. Moorhead / CN

Wednesday 10 June

PS SEMINAR

at 11.00 hrs – PS Auditorium
bldg 26/2-024

The PS Linac, 1956 to 1973

by C.S. TAYLOR / CERN-PS

Friday 12 June

ECFA – EUROPEAN COMMITTEE FOR FUTURE ACCELERATORS

at 09.30 hrs – Council Chamber

- 09.30
1. *Approval of the Draft Minutes of the Fiftieth Plenary ECFA Meeting*
 2. *Approval of the Draft Agenda*
 3. *Chairman's Report*
 4. *High Energy Physics Programme in the US (S. Wojcicki)*

11.00 *Coffee*

5. *Status of HERA (V. Soergel)*
6. *Election of ECFA Chairman*

Lunch

- 14.00
7. *CERN Fellowship Programme (P. Darriulat)*
 8. *Status and Projects of IHEP Protvino (L. Soloviev)*
 9. *Status of LHC (G. Brianti)*
 10. *Discussion*
 11. *Any Other Business*

16.30 *End of meeting*

Friday 19 June

OPEN INFORMATION MEETING ON MASSIVE PARALLEL PROCESSING

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

The recently formed steering group for Massive Parallel Processing is organizing an open information meeting to make a review of commercial products and current activities in this field and to discuss plans for the future.

The meeting will be introduced with a presentation by P.G. Innocenti and concluded with a panel discussion chaired by D.O. Williams.

Several presentations during the day will cover subjects such as:

- * Computer farming versus MPP
- * Review of CERN MPP activity in ESPRIT projects
- * Parallel programming techniques and paradigms
- * Assessment of MPP technology and market offering
- * Applications of MPP to simulation and data analysis
- * MPP for LHC
- * Potential applications in accelerator design and control
- * MPP for theoretical physics

For information please contact F. Gagliardi /CERN-CN/
FAB@VXCERN.CERN.CH

EDUCATION SERVICES EDUCATIFS

ENSEIGNEMENT GENERAL

Tél. 5811

Jeuudi 4 juin

à 13.00 h – Amphithéâtre
Science pour tous
par Rafel CARRERAS

POUR / FOR INFORMATION

Université de Genève

Département de Physique Nucléaire et
Corpusculaire
Ecole de Physique
24, quai Ernest-Ansermet
1211 Genève 4
Tél. 7026273 ou 7026369

Lundi 15 juin

SÉMINAIRE DE PHYSIQUE CORPUSCULAIRE

à 16.15 h – Auditoire Stueckelberg

**EAGLE “Experiment for Accurate Gamma,
Lepton and Energy measurements”**

par P. JENNI / CERN – PPE

La Collaboration EAGLE propose de concevoir un détecteur dont le but serait une utilisation maximale du potentiel de découverte du LHC dès sa mise en service. L’objectif principal de l’expérience est de fonctionner à une haute luminosité pp, avec une performance équilibrée pour l’identification des électrons, des gammas, des muons, des gerbes hadroniques et de l’énergie transverse manquante.

Nous présentons le concept du détecteur, des résultats des programmes de Recherche et Développement, et la performance que nous attendons de ce détecteur.

LAPP

Laboratoire d’Annecy de Physique des Particules

Chemin de Bellevue
BP 110
F – 74941 Annecy-le-Vieux
Tél. 50 23 32 45

Vendredi 5 juin

à 10h45 – Auditorium du LAPP

**Implications des derniers résultats de KOBE
sur le fond micro onde cosmique**

par Monique SIGNORE / ENS