

CONSEIL D'ADMINISTRATION DE LA CAISSE DE PENSIONS

Le procès-verbal de l'Assemblée générale annuelle des membres et bénéficiaires de la Caisse, qui s'est tenue le 13 septembre 1993, est disponible dans les secrétariats de division. Les bénéficiaires de pension peuvent obtenir ce document en s'adressant directement à l'Administration de la Caisse, tél. (767) 4421/2738.

SEMINARS SEMINAIRES

Monday 14 March

PRESENTATION

at 14.00 hrs – CN Auditorium
bldg 31/3-005

Silicon Graphic Inc. CASE tools

by Mark HUGHES / Product marketing manager

Mark HUGHES, will present the SGI CASE tools based on the industry-standard XTM and OSF/MotifTM user interface platform. CASEVision/WorkShop, Silicon Graphic's new release of CASE tools, has been designed to help programmers break through the software complexity barrier. By coupling a new generation of visually-oriented software development tools with powerful but low-cost color graphics workstations, Silicon Graphics has redefined the state of the art in modern software development environments. CASEVision/WorkShop support software development in C, Fortran and C++ on Silicon Graphics workstations. The open architecture of CodeVision is based on the industry-standard XTM and OSF/MotifTM user interface platform. CASEVision/WorkShop is a set of four integrated programming tools that enable the individual programmer to :

- To analyse code structure.
- To debug compiled code.
- To tune run-time performance.
- To analyse code for test coverage.

Together the WorkShop tools provide a multi-view, interactive programming environment for developing software in C, C++, or Fortran.

The four main WorkShop components are:-

- The debugger cvd.
- The static analyser cvstatic.
- The performance analyser cvspeed.
- The coverage analyser, cvcov (also known as Tester).

In addition, WorkShop also provides a context-sensitive on-line help system, an annotated source code viewer, and a build analyser. As part of the SGI CASEVision offering, CASEVision/WorkShop Pro MPF is a programming tool that enables the individual programmer to understand the structure and parallelization of his or her FORTRAN program.

GOVERNING BOARD OF THE PENSION FUND

The minutes of the Annual General Assembly of the members and beneficiaries of the Fund, which was held on 13 September 1993, is available at division secretariats. Pension beneficiaries can obtain this document directly from the Administration of the Fund, tel. (767)4421/2738.

Monday 14 March

PPE SEMINAR

at 16.30 hrs – Auditorium

B physics results from CDF

by Jonathan LEWIS / Fermilab

Recent B physics results from CDF will be presented including measurement of the B_c mass and lifetime using 20 pb^{-1} of data from the 1992-93 Tevatron collider run as well as measurements of B production cross-sections using exclusive final states, partially reconstructed semileptonic decays and inclusive J/ψ production.

Tuesday 15 March

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

The steady vanishing of solar neutrino problem(s)

by Douglas R.O. MORRISON / CERN

For over 20 years the Conventional Wisdom has been that the flux of neutrinos observed to come from the Sun was much less than that found from calculations using a Standard Solar Model, SSM. This difference was so significant that New Physics would be required. Further it was claimed that the observed flux varied with the inverse of the sunspot cycle of 11 years. This surprising 11 years cycle problem is generally considered to have vanished as it was not observed by the Kamiokande experiment and as the original experiment that observed it now says that it is a 2 standard deviation effect and not 5 as originally claimed. The neutrino flux problem is steadily vanishing as the theoretical and experimental values approach one another. Two of the four experiments report results that are increasing with time. The theoretical values are decreasing with time as the input data changes and equally important, errors are becoming more realistic and larger. Some of the main changes to the input data are smaller cross sections measured and calculated for the ${}^7\text{Be}(p,g){}^8\text{B}$ and ${}^4\text{He}({}^3\text{He},g){}^7\text{Be}$ reactions. The overall conclusion is that experiment and theory are now so close that they are not inconsistent within the errors.

* Tea & coffee will be served at 16.00 hrs

Wednesday 16 March

PRESENTATION

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

VMEbus Interface Products

by Cypress Semiconductors and Basix

This presentation will focus on VMEbus interface products from Cypress Semiconductors, like the VIC068, VAC068, VIC64, CY7C964 chips, and the recently announced new slave interface chip CY7C960.

Wednesday 16 March

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Thermal gauge theories: back to basics

by Peter LANDSHOFF / DAMTP, Cambridge University

By going back to first principles, one can set up a perturbation theory for finite-temperature gauge theories that is simpler to use than the conventional formalism. It is important always to make one's calculation as complete as possible; otherwise there is a risk of missing cancellations that frequently occur. An example is the radiation of photons from a charged particle in a heat bath, where failure to take account of all effects leads to results that are clearly unphysical.

Thursday 17 March

TECHNICAL PRESENTATION

at 09.00 hrs – bldg 73/2-027

Product presentation "Ultra High Vacuum Components"

by N. RIEGER / Sales Engineer, Dr TOGA / Engineering Manager UHV-Components, Mr KOYAMA / Product Manager, Metallized Products / Kyocera Fineceramics GmbH (D/J)

Company profile – Kyocera ceramics technology

a) Characteristics of ceramics

b) Material options

Kyocera process technologies

a) Thickfilm metallization

b) Thin film (vaporization/ion plating)

c) Active metal bond

Kyocera brazing technology on ceramics with various metals

a) Metal materials

b) Brazing materials

Kyocera technologies and products

a) Ultra high vacuum feedthroughs

b) Ultra high vacuum components (isolators and sapphire windows/accelerators)

c) Standards/customized products

Question and answer session.

Language : English

Information : M. Diraison / FI-A / 4585

Jeudi 17 mars

SEMINAIRE MT DE BASE

à 09.00 h – Amphithéâtre AT
bât. 30, 7^e étage

Collimateurs / Pick-up LHC

par R. JUNG & L. VOS / CERN-SL

Thursday 17 March

PRESENTATION

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

PowerPC in VMEbus and other products

by Radstone Technology (UK)

The talk will focus on two new VMEbus products from Radstone Technology. The first is a CPU module equipped with a 50 or 66MHz PowerPC 601, up to 256Mbytes DRAM, VMEbus, VSB, Ethernet and SCSI. The standard software environments include LynxOS and UNIX. This module is the first of a range of CPUs based on the PowerPC.

The other is new low-cost I/O processor based on the Motorola MC68360 Quad Integrated Communications Controller, which may be optionally equipped with a MC68040 when more processing power is required. The board carries mezzanine modules with a range of standard options, or for the user's own developments.

In addition, the full range of Radstone VMEbus products will be presented (including FDDI, Ethernet and SCSI controllers, memory modules, CPU modules based on the MIPS R3000 and the MC68000 families of microprocessors up to and including the 68040, turn-key OS-9 development systems, etc.).

Friday 18 March

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

QCD-based space-time description of nuclear collisions at RHIC and LHC

by Klaus KINDER-GEIGER / CERN

Aspects of the early stage of heavy ion collisions at collider energies as understood on the basis of the improved parton model and kinetic theory are presented. The space-time evolution of these reactions is investigated in terms of the dissipative dynamics of (semi)hard quark and gluon interactions within perturbative QCD. The partons' phase-space distributions are evolved in real time according to a transport equation through multiple collisions, emission and absorption processes. The resulting parton cascade picture is applied to study the issues of "in medium QCD", thermalization, chemical equilibration and particle production in pA and AA collisions at RHIC and LHC.

Monday 21 March*

SL SEMINAR

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

Tutorial on Object Oriented Programming

by P. KUNZ / Stanford Linear Accelerator Center

Invented over 20 years ago, matured in the 1980s, Object Oriented Programming (OOP) appears to be the key software technology of the 1990s. In a wide range of fields from graphics to numeric simulations, OOP has proven the superiority of its technology. Programming with OOP technology is not difficult but most programmers find a high threshold in learning the concepts. In his tutorial, P. Kunz will discuss the basic concepts of OOP in simple terms and examples targeted to an audience experienced with traditional languages such as FORTRAN.

* Please note unusual day

Monday 21 March

PPE SEMINAR

at 16.30 hrs – Auditorium

B** tag : orbitally excited heavy-light mesons

by Chris QUIGG / Fermilab

Orbitally excited heavy-light mesons are potentially important as tools for tagging the flavors and momenta of ground-state pseudoscalars detected through weak decays. Efficient flavor-tagging would greatly enhance the prospects for the study of CP violation in hadron colliders or in a high-luminosity LEP. Heavy-quark symmetry provides estimates of masses and widths of p-wave B , B_s , D , and D_s mesons. I will compare these predictions with what is known about the charmed mesons and discuss their implications for the B and B_s families.

Tuesday 22 March

DETECTOR R & D COMMITTEE

at 09.00 hrs – Council Chamber

Open session

1. RD-22 Status Report : Crystal extraction at the SPS (ISA Aarhus–CERN–ESRF Grenoble–Frascati–Lecce–Pisa–La Sapienza Roma–Torino–Trieste–MPI für Metallforschung Stuttgart; DRDC 94-11; L. Lanceri).
2. RD-32 Status Report : Development of a Time Projection Chamber with high two track resolution capability for collider experiments (LBL–INP Cracow–GSI Darmstadt–IKF Frankfurt–CERN–MPI S. Wenig).
3. RD-33 Status Report : Study of the TGT concept for liquid argon calorimetry (RWTH Aachen–CERN–JINR Dubna–Heidelberg–Slovak Academy of Sciences–MPI Munich–IHEP Protvino; DRDC 94-8; H. Oberlack).
4. RD-34 Status Report : Developments for a scintillator tile sampling hadron calorimeter with "longitudinal" tile configuration (IFAE Barcelona–IAP Bucharest–LPC Clermont-Ferrand–CERN–EPI Armenia–LIP & Univ. Lisbon–Prague–COPPE/EE/UFRJ Rio de Janeiro–IHEP Protvino; DRDC 94-12; M. Cavalli-Sforza).
5. Proposal : Object oriented approach to software development for LHC experiments (Birmingham–CERN–Edinburgh–KEK Japan–INP Krakow–LAL Orsay–

NIKHEF–RAL–DAPNIA–SEI Saclay–SEFT Helsinki–SSC Lab. Dallas–ICU Tokyo–Utrecht; DRDC 94-9/P55; K. Bos).

Closed session

following the Open Session continuing on
Wednesday 23 March at 09.00 hrs, 6th floor Conference Room

Tuesday 22 March

PRESENTATION

at 10.00 hrs – CN Auditorium

bldg 31/3-005

**POWERENGINE The first VME Board Computer
based on IBM PowerPC 601 Microprocessor**
by CETIA

Tuesday 22 March

CERN COLLOQUIUM

at 16.30 hrs – Auditorium

**Functional mapping of the human brain
with positron tomography**

by R.S.J. FRACKOWIAK / MRC Clinical Sciences
Centre, Cyclotron Unit, Hammersmith Hospital, London

Wednesday 23 March

COMPUTING SEMINAR

at 16.00 hrs – CN Auditorium

bldg 31/3-005

**An experiment in object-oriented design of a scientific
visualization tool**

by Gregory KOZLOVSKY / CERN-CN

Thursday 24 March

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium

Electroweak results from CDF

by Young-Kee KIM / LBL–CDF collaboration

EDUCATION SERVICES EDUCATIFS

ENSEIGNEMENT GÉNÉRAL

Tél. 5811

Jeudi 17 mars

à 13.00 h – Amphithéâtre

Science pour tous

par Rafel CARRERAS

ACADEMIC TRAINING

Tel. 3127

LECTURE SERIES

14, 15, 16, 17 & 18 March

11.00 to 12.00 hrs – Auditorium

New detector techniques

by E. IAROCCHI / Frascati, Italy

The intense R&D effort being carried out in view of LHC, has given rise in a relatively short time to a wide spectrum of new detector concepts and technologies. Subject of the lectures will be some of the most interesting new ideas and developments, in the field of noble liquid, crystal and scintillating fiber calorimeters, and gas, solid state and scintillating fiber trackers. The emphasis will be on the basic aspects of detector operation.