

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 2 octobre 1996, 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 21 April

ECP PRESENTATIONS AT CHEP '97 – SESSION 1

at 11.00 hrs – bldg 13/2-005

ECP personnel who gave talks at CHEP '97 will repeat their presentations for the benefit of those people who were unable to attend the conference. A list of the talks to be presented in this and the next session scheduled for 28 April can be found in the ECP Web pages.

Tuesday 22 April

SEMINAR ON INDUSTRIAL NETWORKS IN EUROPE AND CERN'S ROLE IN TECHNOLOGICAL INNOVATION

09.00 to 12.45 hrs – PS Auditorium, bldg 6/2-024

A wide range of socio-economic research literature indicates that science – and basic research in particular – is an important engine of economic growth and technological innovation. In that context, one could ask: to what extent does European industry use and benefit from the new technologies which have originated from CERN programmes? The Web is one obvious example but are there others? How significant is the effect?

With the support of CERN, the Norwegian Foundation of Research in Economics and Business Administration (SNF) is launching a pilot study to look at the long-term economic and technological effects of LHC in the European industry. In preparing this, SNF is organizing a half-day seminar at CERN about industrial networks and impact of R&D in Europe. The seminar has two major objectives:

- 1) to provide a general review of research made in the domain of industrial networks, technology and economic growth;
- 2) to get more familiar with CERN technologies and their potential for applications outside the domain of particle physics, as well as with previous research done on industrial benefits of CERN.

The seminar is aimed at researchers both in physics and economics, industrial partners and people in general interested in technological collaboration and their socio-economic effects. The seminar is open to all personnel.

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 2 October 1996, is available at division secretariats. Pension beneficiaries can obtain this document directly from the Administration of the Fund, tel. (767) 4421/2738.

Pour de plus amples informations, prière de consulter
For full information on these seminars, please see
<http://wwwas.cern.ch/Bulletin/Seminars/current.html>

Programme:

- 09.00 Welcome M. Robin, Head of Administration
- 09.15 Introduction / T. Kleppesto (SNF Bergen, Project coordinator)
- 09.30 Prof. H. Hakansson (Uppsala University)
Industrial networks – recent studies
- 10.00 Prof. B.A. Akselsen (NHH Bergen)
Strategic supply in research-driven companies
- 10.30 Prof. P. Yla-Anttila (ETLA Helsinki)
Knowledge spillovers and economic growth – evidence from Finnish studies
- 11.00 Coffee break
- 11.15 H. Hoffmann (CERN)
CERN in a R&D network
- 11.45 O. Barbalat (CERN):
20 years of technology transfer at CERN"
- 12.15 Discussion
- 12.45 End of seminar

For details, please contact:

Tom Kleppesto (tom.kleppesto@snf.no)

or Markus Nordberg (markus.nordberg@cern.ch)

Wednesday 23 April

TECHNICAL PRESENTATION

at 10.30 hrs – IT Auditorium, bldg 31/3-004-5

DIGITAL presents AllConnect for UNIX

by T. VALLI / European Program Manager

Tapio VALLI, DIGITAL's European Program Manager, will present the AllConnect program for UNIX. This program includes hardware, software and services from DIGITAL and partners that offer solutions in three environments of utmost interest and need to UNIX and NT users:

- Interoperability.
- Software development.
- Software Migration.

The program focuses on the pairing of NT (on Alpha and on Intel) and UNIX (from DIGITAL and other UNIX vendors).

In the words of D.H.Brown Associates ("Technology Trends", 21st Feb.1997): "DIGITAL's current AllConnect product family provides the most comprehensive interoperability, application development and migration tools for spanning the chasm between Microsoft's platforms and UNIX".

There will be time for a question & answer session after the presentation which will end about 12:00

Organiser : S. Cannon / IT / 75036

Wednesday 23 April

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

New communication mechanisms for supersymmetry breaking

by John MARCH-RUSSELL / IAS, Princeton

Motivated in part by the FCNC constraints, the idea that SUSY breaking is mediated by gauge interactions (GMSB) has undergone a revival. We review the successes of the GMSB models of Dine, Nelson and collaborators, and then discuss their "failings", which are of three general types: 1) fine-tuning, 2) cosmological and 3) aesthetic. An alternate general scheme of GMSB is proposed which promises very attractive solutions to these difficulties, and which involves the direct embedding of the MSSM within the dynamical SUSY breaking sector. We outline the considerable progress achieved in their construction. We conclude with work in progress that addresses the last remaining issue blocking construction of a fully successful model in this new class.

Wednesday 23 April

COMPUTING SEMINAR

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

Highlights from CHEP '97

by John APOSTOLAKIS & Ignacio REGUERO / CERN-IT

The speakers will review the presentations given at this year's Computing in High Energy Physics (CHEP '97) conference, both from a general point of view and in their specific areas of interest.

Organiser : G.Folger / IT

Wednesday 23 April

ISOLDE SEMINAR

at 16.00 hrs – TH Conference room

Study of radioactive fission products migration in high level waste storage materials by means of ion implantation

by N. MONCOFFRE / I.P.N. & Univ. Claude Bernard, Lyon

High level nuclear wastes (long live fission products, actinides, activation products) issued from commercial and research nuclear power reactors represent a crucial problem for environment safety. At the moment, these wastes are stored at the surface either directly (open cycle) or after reprocessing (closed cycle). In the future geological storage will be performed. Depending on the type of disposal, two

materials are used as migration barriers: zircaloy cladding tubes or glasses. In order to predict a radio nuclide release from these waste forms, migration studies are needed. Ion implantation is a good way to introduce well known concentration of radio nuclides and provides a good tool to simulate diffusion phenomena. We will focus this talk on the fission product migration in two cases which are i) the study of glass lixiviation phenomena related to specific chemical properties of isotopes in an isobaric chain and (ii) the study of fission product diffusion (typically iodine) in zircaloy at very low concentration as a function of defect density.

** Please note change of date & time!*

Thursday 24 April

ESONE MEETING

at 09.00 hrs – bldg 160/1-009

Optical Links and Buses

ESONE, the committee for European Studies On Norms for Electronics, is holding a half day meeting on optical links and buses.

This is first a series of informative presentations and discussions, which will allow users to compare and update themselves on developments in optical bus and link technologies.

All those with an interest in optical data transmission are invited to take part.

Provisional Programme

1. Siemens Fibre Optics Product Overview

by Peter NEUMANN / Product Manager

- Introduction to Fibre Optics,
- Information on products and projects.

2. Parallel Optical Link (PAROLI)

by Kurt ARETZ / Project Manager

There are many applications for parallel optical links in computer bus connections, and the bundling of independent serial data channels, etc. PAROLI modules (transmitter and receiver) are driven with a 3.3 V power supply and use LVDS technology. Maximum data throughput is 15 Gbit/s using 12 optical fibres.

3. Discussion

For more information, please refer to the ESONE Web page (<http://www.cern.ch/ESONE/ESONE.html>).

Information: C.Parkman / ECP/ 73963 chris.parkman@cern.ch

Technical contact: H.Müller / ECP / 73533 hans.muller@cern.ch

Friday 25 April

TECHNICAL PRESENTATION

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

From Gigabits to GigaBYTES per Second HiPPI-800/1600 now today

An introduction to HiPPI-6400 ("SuperHiPPI")

by D. WOERZ, Sales President & C. PICK, President / GENROCO

The first speaker will give an overview of where HiPPI as a high speed networking technology is today (in the USA) including an overview of their products.

The second speaker will give an introduction to HIPPI-6400 a future high speed networking standard with 6400 Mbit/s bandwidth in each of the full duplex directions.

Organiser : S. Cannon / IT / 75036

Friday 25 April

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

Constraints on the MSSM from precision data

by Damien PIERCE / SLAC

The standard model fit to the precision measurements is quite good, especially since the value of R_b (R_c) has come into better (perfect) agreement. The prospects for improving the fit by extending the standard model have worsened. In supersymmetric models the χ^2 can be only marginally improved. The accuracy of the fit is worse because of the extra number of degrees of freedom. On the other hand, the supersymmetric corrections can lead to a large χ^2 , and parts of the supersymmetric parameter space can be ruled out. In this talk, we show the results of a χ^2 analysis, including all the known higher-order standard model corrections and all of the one-loop supersymmetric corrections. Taking boundary conditions at a high scale allows us to reduce the parameter space. Such boundary conditions result in a highly-correlated spectrum. As many particles become light simultaneously, the χ^2 will, in general, increase. We show results for both supergravity and gauge-mediated models.

Monday 28 April

ECP PRESENTATIONS AT CHEP '97 - SESSION 2

at 11.00 hrs – bldg 13/2-005

ECP personnel who gave talks at CHEP '97 will repeat their presentations for the benefit of those people who were unable to attend the conference. A list of the talks to be presented in the session can be found in the ECP Web pages.

Monday 28 April

PPE SEMINAR

at 16.30 hrs – Auditorium*

B^0 - B^0 bar mixing at SLD : current measurements and future prospects

by Stephane WILLOCQ / SLAC

The time dependence of B^0 - B^0 bar mixing has been measured using a sample of 150 000 hadronic Z decays collected by

the SLD experiment at the SLC between 1993 and 1995. Four different analyses have been performed. All analyses tag the B candidate at production with a combined tag that exploits the large polarized b forward-backward asymmetry together with the opposite hemisphere b jet charge. Two of the analyses exploit 3D topological vertexing to determine the B meson decay length, in conjunction with either a charged kaon or charge dipole final state tag. The other two analyses use identified high (p_T) leptons intersected with either a partially reconstructed D meson, or the weighted average of tracks in the b jet. Future prospects for B_s^0 - B_s^0 bar mixing will also be reviewed.

* Tea & coffee will be served at 16.00 hrs.

Tuesday 29 April

TECHNICAL PRESENTATION

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

AZIZA – a distributed Web Manager based on Objectivity/DB

by W. EVANS / General Manager AZIZA Division of Objectivity, previously VP of Marketing with Objectivity

Aziza, an Enterprise Web Manager, is a solution to the content management crisis on multi-server web sites. Aziza was designed to allow the management of large-scale web sites: sites containing millions of pages, updated by thousands of authors and distributed across dozens of servers. Aziza provides non-invasive link integrity, uniform cross-server access controls, peer-to-peer content replication across servers, and a drag-and-drop graphical user interface for web site administration.

Aziza is based on the Objectivity/DB object database and manages all web objects (metadata, content of all MIME types and native documents) in the Objectivity database. Aziza applies the transaction model of the database to the management of web content to allow multiple administrators and authors simultaneous access to the site. The core Aziza Web Object Manager is implemented on NT and UNIX platforms; the Aziza User Console is implemented in Java for execution in any Web browser.

This presentation will discuss the data model underlying the Aziza Enterprise Web Manager, the benefits of content replication, the issues of cross-platform access controls, and integration of Aziza with off-the-shelf Web servers, browsers, content editors and load balancing routers.

A demonstration of Aziza will be provided.

Organiser : S. Cannon / IT / 75036