

détail des dépenses de l'année en cours et les prévisions de dépenses de l'année suivante soient systématiquement présentés lors de la préparation du budget préliminaire et soient inclus dans le rapport annuel.

Il a également pris note avec regrets du décès de deux bénéficiaires, MM. A. Schleich et A. Zambrella.

SEMINARS SEMINAIRES

Monday 11 November

TECHNICAL PRESENTATION

10.00-11.30 & 14.00-17.00 hrs – CN Auditorium
bldg 31/3-005

TRI/ADD Program
by DEC

10.00-11.30 : General Presentation

- DEC I/O strategy
- Goals and strategies of the TRI/ADD program worldwide
- Short Introduction to TURBOchannel
- Introduction to the new industry standard ACCESS bus

14.00-17.00 : Technical presentation/discussion

- using the TURBOchannel ASICs and designers kit
- designing your device driver for OSF and Ultrix (VME, TURBOchannel and ACCESS buses)
- designing your option for serviceability

Organizer : Attila Koppanyi / CN / 4933 /
attila@cernvm

Tuesday 12 November

LEP EXPERIMENTS COMMITTEE

at 09.30 hrs – Auditorium

Open Session

- 09.30 - 10.30 Status of LEP (V. Hatton, S. Myers)
10.30 - 11.00 Report from the LEP Energy Working Group
11.00 - 11.30 Coffee Break
11.30 - 12.30 Report from the Polarization Working Group

Status Reports on the Experiments

- 14.00 - 14.30 ALEPH
14.30 - 15.00 DELPHI
15.00 - 15.30 OPAL
15.30 - 16.00 L3
16.00 - 16.30 Tea Break
16.30 - 17.00 Status of SLC (M. Breidenbach)
17.00 - 17.30 Proposal for Upgrading the OPAL Luminosity Detector

The Governing Board also noted, with regret, the deaths of two beneficiaries, Mr A. Schleich and Mr A. Zambrella.

Closed Session

Wednesday 13 November, Conference Room, 6th
Floor, Admin. Building

Wednesday 13 November

TECHNICAL PRESENTATION

09.30-12.30 & 14.00-16.00 h – ECP Conference
Room
bldg 13/2-005

Thomson-TMS (F), represented by Modulator Composant SA (CH), will give an updated information on Charged Coupled Devices (CCDs) and Flash A/D Converters, including capability of radiation hardening of the products.

09.30-12.30 CCD presentation by Alain Jutant, CCD
Marketing Manager

General features of TMS's CCDs,
technologies available at TMS, technologies
in development, review of TMS's new
products (available or to be introduced)

14.00-16.00 Flash A/D presentation by Bertrand
Woestelandt, Standard Products Marketing
Manager
TMS's range of standard products, Flash
A/D Converters family

Information : M. Diraison / FI / 4585

Wednesday 13 November

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

**Non-analyticity in the coupling constant and
supersymmetry 'breaking'**

by Alexander TURBINER / ITEP, Moscow & CPT,
Marseille

A new type of non-analytic behaviour in the coupling constant will be discussed. I will show that, besides ordinary singularities like poles, branch points and so on, a piece-wise analyticity takes place. It means that for well-defined theories a space of solutions is subdivided into analytically-disconnected domains, which means that it is impossible to make analytic continuation from one domain to another. I will argue that this type of non-analyticity is quite common and, in a certain sense, is hidden, unlike the usual one. At least, in quantum mechanics, the origin of this phenomenon is related to the existence of constraints (like the requirement of normalizability of wave functions for the stationary Schroedinger equation). It will be

shown that this type of non-analyticity will appear quite naturally in supersymmetric quantum mechanics leading to a supersymmetry 'breaking': at a certain point in the coupling constant there will appear an interchange in the definition of bosonic and fermionic sectors – a bosonic sector becomes fermionic, and vice versa. This phenomenon seems to be a general property of SUSY quantum mechanics with unbroken supersymmetry. It will be further demonstrated that this phenomenon occurs in the Fokker-Planck equation and, correspondingly, lies behind the Greensite-Halpern prescription of stabilizing bottomless theories.

Wednesday 13 November

COMPUTING SEMINAR

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

The Scalable Coherent Interface

by Andre BOGAERTS / CERN-ECP

The Scalable Coherent Interface (SCI) is in the final stage of acceptance as an IEEE standard. SCI is based on point-to-point connections to provide computer-bus-like services with transfer rates of up to 1 Gbyte/s. SCI may be used for a variety of applications, including processors tightly coupled to memory or loosely coupled distributed workstations and I/O. The status of SCI, its different implementation options (ECL, GaAs, CMOS, electrical and optical interconnections) and its interfacing to processors and memories, will be briefly reviewed. Some aspects of the SCI protocols, implemented in hardware, such as scalability, cache coherency and flow control will be highlighted. Innovative features of the SCI can lead to significant savings in hardware and software. This will be illustrated by an application for Data Acquisition proposed for LHC.

Andre Bogaerts has a background in real-time Data Acquisition systems.

Thursday 14 November

TECHNICAL PRESENTATION

10.00-16.00 hrs – bldg 17/1-007

Tektronix International AG, GPID Division (USA/CH), will demonstrate the following products:

- Tektronix Printers, 4697 Colorquick Series, 4694 Phaser II Series, 4698 Phaser III Series
- Tektronix Terminals, XP10 Series, XP20 Series

Applications: business graphics, scientific visualization, graphic applications, engineering, process control, CAD/CAM.

Potential users are also invited to come and test their own application.

Languages: English, French

Information: M. Diraison / FI / 4585

Thursday 14 November

PRESENTATION

10.00–12.00 hrs – AT Auditorium

bldg 30/7th floor

Status and Developments of Motorola Microprocessors, CISC and RISC

by Rudi SCHMITTBERGER & Clive GAY / Motorola

The speakers will give an overview of the latest developments in Motorola's RISC and CISC products lines. This will include the well known 68000 and 88000 families, and the embedded processors derived from them, as well as the 56000 and 96000 Digital Signal Processors. News of the 'Power PC', subject of the recent joint announcement by Apple, IBM and Motorola, will also be given.

Information: Chris Parkman / CN / 3963

Friday 15 November

PRESENTATION

at 10.00 hrs – AT Auditorium

bldg 30/7th floor

MUSTIG, a graphical language for interactive design and testing

by GRESILOG, Meylan Zirst, France

MUSTIG, a graphical language for the design and test of DSP applications is presented. Its interactive graphical editor of exceptional conviviality opens the way to easy manipulation and representation of scientific data. With this editor the user builds a processing graph following a powerful yet simple syntax, allowing to cope with multidimensional signals and data. With the same ease, MUSTIG's input and output can be arranged in a window, ready for publication, retaining its active zones with immediate update of the output (like a spreadsheet). Easy interfacing to external user routines in C, Fortran and Pascal is available. Due to its real time capabilities it can also be used for behavioural simulation of electronic circuits or system monitoring. Mathematical libraries (Eispack, Linpack) are included, as well as MUSTIG files for teaching in Signal Processing. MUSTIG was developed at CEPHAG, a laboratory from the "Institut National Polytechnique de Grenoble", for the needs of research and teaching in signal processing. It is available on the Macintosh (standalone or linked to more powerful machines for calculations) or on UNIX platforms with MOTIF or OpenLook.

Information: Werner Jank / ECP / 3754, 3525

Monday 18 November

COMPUTING SEMINAR

at 10.00 hrs – CN Auditorium

bldg 31/3-005

CRAY Research Compiler Directions

by Irene Qualters / Cray Research

This talk will trace
to future releases

...ers
... to Fortran

77/90 and, secondarily, to C. The role of existing and future standards, the integration of specific tools with compilers, the various approaches to improve performance will be discussed with an emphasis on how this is visible to the user.

Irene Qualters has worked with CRI for 15 years, primarily in compilers, basic math functions and run-time libraries. For the last 3.5 years, she has been head of compilers at Cray. Currently she is on sabbatical leave at ETH working on Maple, a symbolic computational language. In December she will return to the USA to head the software division of Cray.

Monday 18 November

AC SEMINAR

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

The LHC RF System

by D. BOUSSARD / CERN-SL

Transient beam loading effects dominate the design of the LHC RF system; this leads to the choice of superconducting cavities with the highest possible stored energy. The installed RF power is determined by the need to handle the strong LHC beams (2×0.85 A each). A technique will be presented which reduces that power to levels compatible with the present RF window performance. The main 400 MHz RF system will be complemented by wideband feedback cavities necessary to damp injection errors and coupled bunch longitudinal instabilities.

Tuesday 19 November

AS SEMINAR

at 11.00 hrs – Council Chamber

ALICE Library System

Presentation of new version 3

by Mogens SANDFAER / CERN AS-SI

Tuesday 19 November

CERN COLLOQUIUM

at 16.30 hrs – Auditorium

A new look at the X-ray sky with ROSAT

by J. TRUMPER / Max Planck Institut / Garching
bei Munchen

Wednesday 20 November

CERN COMPUTING COLLOQUIUM

at 16.30 hrs – Auditorium

Software Quality Control

by Marco MAIOCCHI / University of Milan

Thursday 21 November

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium

High energy neutrino astronomy

(A review of their sources and methods of detection)

by V.S. BEREZINSKY / INFN, Laboratori
Nazionali del Gran Sasso & Institute of Nuclear
Research, Moscow

TRAINING AND EDUCATION ENSEIGNEMENT

ACADEMIC TRAINING

Tel. 2844

Lectures series for Postgraduate students

14, 18, 19, 20 & 22 November

10.30-12.00 hrs – Auditorium

QCD

by J. STIRLING / Science Laboratory Durham

ENSEIGNEMENT GENERAL

Tél. 5811

Jeudi 14 novembre

de 13.00 à 13.30 h – Amphithéâtre

Science pour tous

par Rafel CARRERAS