



SEMINARS SEMINAIRES

Monday 22 March

DETECTOR SEMINAR

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

**The Hybrid Photo Diode :
a new kind of light detector**

by Riccardo DESALVO / CERN-PPE

The Hybrid Photo Diode (HPD) is a new kind of photon detector based on a planar silicon diode facing a standard photocathode inside a vacuum tube. It was developed and tested in collaboration with industrial partners. The HPD main characteristics, including fast response, gain in the order of thousands, high gain stability, dynamic range over up to eight orders of magnitude, very good single photo electron capabilities and insensitivity to magnetic fields, will be presented. This new and compact light detector is easy to pixelize and, due to its construction peculiarities, might allow the use of substantially improved photo cathodes. The HPD may be a valid replacement for the ubiquitous photomultiplier and a key element in all the experiments immersed in a magnetic field and using light mediated instruments. Representatives of the industrial partners of this development will be available after the seminar at building 29-1-001 (tel. 8154) for commercial enquiries.

Monday 22 March

PPE SEMINAR

at 16.30 hrs – Auditorium

Measurement of the B_s meson mass and lifetime

by V. SHARMA / University of Wisconsin
Madison (ALEPH collaboration)

From a sample of about 1 million hadronic Z^0 decays recorded during 1991-92 with the ALEPH detector at LEP, a handful of B_s mesons have been completely reconstructed in several hadronic decay channels and the mass of the B_s meson has been measured. In the same data sample, semileptonic decays of the B_s meson have been identified in the decay process $B_s \rightarrow D_s \ell^+ \nu_X$. The lifetime of the B_s meson has been measured from a maximum likelihood fit to the B_s decay length distribution using the silicon microvertex detector. These results and future prospects for such measurements will be discussed.

Tuesday 23 March

SPS AND LEAR EXPERIMENTS COMMITTEE

Open session

at 09.00 hrs – Auditorium

1. Memorandum to the SPSLC: Tracking system for WA98 ; SPSLC 93-5 / P260 Add.1 : H. Gutbrod.
2. Proposal P272: Measurements of pair production and electron capture from the continuum in heavy particle collisions (Oak Ridge National Laboratory – Manne Siegbahn Inst. – Atomic Spectroscopy, Univ. of Lund – Aarhus, Inst. of Physics; SPSLC 92-66 / P272) : C.R. Vane.
3. Proposal P273: Electromagnetic dissociation of target nuclei by ^{208}Pb projectiles (Iowa State Univ.; SPSLC 92-67 / P273) : J.C.Hill.
4. Status report on the Pb injector : H. Haseroth.
5. Status report on NA48 : B. Peyaud.
6. Status report on OBELIX : T. Bressani.
7. Status report on CRYSTAL BARREL : P. Blüm.

Closed session

at 14.00 hrs – 6th floor Conference Room
Main Building

Mardi 23 mars

PRÉSENTATION TECHNIQUE

09.30-12.00 h et 14.00-16.30h

Amphithéâtre AT, bât. 30/7^e étage

René Faigle S.A. (CH) présente la nouvelle gamme de photocopieurs NASHUATEC de Nashua (J/GB).

D'une part, de grands progrès ont été obtenus sur le plan écologique: par exemple, le nouveau tambour OPC en matière organique, la faible consommation en électricité, le filtre qui élimine les émissions d'ozone, le fonctionnement irréprochable en cas d'utilisation de toutes sortes de papier recyclés. D'autre part, que cela soit des 8 copies par minute pour les petits volumes aux 50 copies par minute aptes à produire 50.000 impressions par mois, tous les copieurs sont entièrement modulables, ce qui permet de répondre à chaque besoin.

Langue : français

Renseignements : M. Diraison / FI -A / 4585

Mardi 23 mars

PRÉSENTATION TECHNIQUE

de 10.00 à 12.00 h – bât. 17/1-007

Micro-positionnement, fibre optique et analyse de signaux

par GMP S.A. (CH), représentant Physik Instrumente (D), Aérotech (D) et TMC (USA)

Matériel exposé: Physik Instrumente (D), Piézo 245 avec comparateur closed loop, positionneur XY, DC mike driver avec moniteur, caméra et joystick, 2 valises de présentation de petit matériel, manipulation d'interférométrie, 3 axes motorisés avec DC Mike et rotation – Aerotech (D), 1 unidex 1 avec ATS302, 1 Unidex 400 avec ATS3000 – TMC (USA), petite table anti-vibratoire, positionnement de haute précision, équipement pour expérience dans l'optique, technique de traitement de signaux.

Langues : allemand, anglais, français

Renseignements : M. Diraison / FI-A / 4585

Tuesday 23 March

PRESENTATION

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

Motorola VMEbus Products

Motorola is the world leader of the VMEbus market. During this presentation, Motorola's director of VME components marketing, J. Gipper, will at first go through the technology roadmaps of the various VMEbus-product lines. In the product update section he will discuss features of specific products and how they can be used to solve computing problems at CERN.

1. Market Overview and VMEbus Direction
2. Motorola Product Strategy; Embedded Engines, Single Board Engines, Multiprocessor Engines, Industrial I/O, Communication Modules
3. Product Update; MVME162 and IndustryPacks, MVME166 with VSB, MVME167 and MVME187 CISC/RISC Single-board computers (SBCs), MVME197 with 88110

The presentation will be in English; questions in French are welcome.

Information : L. Pregernig / CN / 2666 / lfp@cernvm

Tuesday 23 March

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

Semileptonic B decays at CLEO II

Y. KUBOTA / University of Minnesota

Results from CLEO II on $b \rightarrow u$ transitions using inclusive and exclusive semileptonic decays will be reviewed. New results on B^0 mixing will also be presented.

* Tea & coffee will be served at 16.00 hrs.

Wednesday 24 March

PRESENTATIONS

at 10.00 hrs and 11.15 hrs – CN Auditorium
bldg 31/3-005

Ensemble (10.00 hrs) & Fortran Rev (11.15 hrs)

by Knud BALSLEV / Sales Manager Pan Europe & Isabelle MAN / International Systems Engineer, Cadre-International

10.00–11.00

Professional software development in C language

- Cadre Technologies, First Choice in Software Development Automation Solutions
- Cadre Technologies Solutions (Teamwork, Ensemble, RqT, etc.)
- The C software development process : Introduction to Ensemble
- Reverse Engineering : understanding the code at system and detailed levels, measuring the quality and complexity of the code
- Forward Engineering : Code Generation
- Forward Engineering : Test Case Generation and Test Verification
- Documenting existing code and Document production
- Integration of Ensemble with the user's environment
- Demonstration and Questions-Answers

11.15–11.45

FORTTRAN Rev : making your FORTRAN software maintenance productive

- Cadre Technologies, First Choice in Software Development Automation Solutions
- Cadre Technologies Solutions (Teamwork, Ensemble, RqT, etc.)
- The software maintenance costs : Introduction to FORTRAN Reverse Engineering
- Program structure recovery. Navigation through the code at design level
- Documentation production
- Integration with the user's environment
- Demonstration and Questions-Answers

Information : Axel Daneels / AT

Wednesday 24 March

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

The anatomy of ϵ'/ϵ beyond leading logarithms with improved hadronic matrix elements

by A.J. BURAS / Munich

New results for ϵ'/ϵ from the Munich Next-to-Leading Order Club will be presented. They include next-to-leading QCD and QED corrections and hadronic matrix elements which are in accordance with CP-conserving data. Our novel

renormalization group analysis of hadronic matrix elements reveals interesting features. Comparison with the experimental data of NA31 and E731 Collaborations, and with the recent theoretical analysis of the Rome group will be given.

Wednesday 24 March

COMPUTING SEMINAR

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

The CVS Code Management system for UNIX

by Paul KUNZ / SLAC

CVS (Concurrent Versions System) is a widely used code management system for UNIX. Using RCS as its base, CVS automates the check-in and check-out procedures by handling all the files that make up a program, including those in subdirectories, with a single command. CVS also follows the Copy-Modify-Merge scenario which has proven to be effective in a multi-developer environment such as HEP.

Paul Kunz will give a description of CVS and report on its use at SLAC. He will also report on SLAC's modifications to CVS to allow remote access to source code repositories over the Internet.

Jeudi 25 mars

PRÉSENTATION TECHNIQUE

de 09.00 à 16.30 h – bât. 54/2-035

Exposition de composants d'automatisation, de contrôle et industriels

par Carlo GAVAZZI AG (CH)

Matériel présentés: Asco (NL), vannes électromagnétiques standard pour vide et cryogénie, vannes à piston – FEME (I), relais industriels, relais pour cartes circuit imprimé – Electromagnetic (DK), relais statiques 1 et 3 phases, relais de contrôle de courant/phases/tension, minuteriers, détecteurs de proximité inductifs et capacitifs, sondes de niveau résistif/capacitif/photoélectrique, cellules photoélectriques, bus industriel et domotique DUPLINE 128 – Soar/Pantec (I), multimètres – Dossena (I), analyse de réseau, etc.

Langues : allemand, anglais, français

Renseignements : M. Diraison / FI -A / 4585

Friday 26 March

TECHNICAL PRESENTATION

from 09.00 hrs – CN Auditorium
bldg 31/3-005

by Georg MULLER / Intel Munich &
M. SPEICH & G. RIESEN / Industrade AG

09.00 - 12.00 hrs : RMX for WINDOWS

RMX4WIN is based on Intel's 32-bit Realtime Multitasking Executive RMX-III and runs on IBM-compatible PC's with an i386 or i486 CPU. Windows 3.1 runs under RMX4WIN

as task which provides the user with a base for a comfortable, mouse driven, graphic user interface which is compatible to a myriad of existing PC-software. Window's Dynamic Data Exchange capability is used to transfer data between RMX-based tasks and Windows oriented application programs.

14.00 - 16.00 hrs : MULTIBUS-II

MB-II, is a standardized (IEEE 1296) high performance 40...80Mbyte/sec system bus for multiprocessor applications. It is message passing protocol, the "LAN in the box", allows the use of different operating systems (e.g. RMX, UNIX...) on the same system bus. MB-II based Personal-Computer boards with Windows 3.1 can run concurrently with application specific high performance processor- and controller- boards with UNIX or RMX as operating system. You will see a running demonstration, explaining both, the RMX for WINDOWS and MULTIBUS-II. by Intel Munich, Georg Muller and Industrade AG, M. Speich, G. Riesen

Language : English

Information : M. Diraison / FI -A / 4585

Friday 26 March

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

Non-standard analysis of electroweak precision data

by Guido ALTARELLI / CERN

A model-independent method of analysis of the electroweak precision data is described which extends previous work along the same lines by including, together with the leptonic observables at the Z pole, the hadronic observables as well, Γ_T , Γ_h and Γ_b . This is done by adding to the previously defined ϵ_1 , ϵ_2 and ϵ_3 a new parameter ϵ_b which describes the top mass dependence of the $Z \rightarrow b\bar{b}$ vertex. The data are then considered by formulating a hierarchy of simple and general assumptions, without ever having to specify the value of the top mass m_t . The analysis is updated with respect to that presented in the paper CERN-TH.6770/93 with R. Barbieri and F. Caravaglios by taking into account the new LEP results made public at the La Thuile and Moriond 1993 Conferences.

Monday 29 March

PPE SEMINAR

at 16.30 hrs – Auditorium

Recent results from D0

by Ulrich HEINTZ / Columbia University,
New York

The D0 detector has recently been commissioned and is presently taking data at the Fermilab Tevatron. I will report on the status of analysis of these data and present preliminary results from measurements of jet cross-sections and angular distributions, direct photons, single and di-muon production, W and Z boson production, and the search for the top quark in the ee and $e\mu$ channels.