

SEMINARS SEMINAIRES

Lundi 12 février

SEMINAIRE DETECTEUR

à 11.00 h – Salle de conférence ECP, bât. 13/2-005

Photomultiplicateurs céramiques

par Georges COMBY / Sacley

L'emploi de la technologie des céramiques multicouche offre la possibilité de fabriquer des multiplicateurs d'électrons compacts et performants. Associés à une photocathode à l'étage d'entrée et à une structure anodique à l'étage de sortie, on obtient des photomultiplicateurs mono ou multi-voie de faible encombrement.

Au cours de ce séminaire nous décrirons la structure multiplicatrice ainsi que son mode de fabrication puis les principaux résultats de l'étude de faisabilité. Nous montrerons ensuite les caractéristiques dynamiques de fonctionnement de ces nouveaux composants et notamment leur comportement dans un environnement magnétique. La réalisation de photomultiplicateurs à 256 voies, adaptés à des applications spécifiques sera suggérée.

Note: the talk will be given in French from slides written in English.

Monday 12 February

ISOLDE EXPERIMENTS COMMITTEE

Open session

at 14.00 hrs – Council Chamber

1. Introductory remarks by the Chairman.
2. Progress report by the Isolde Technical Group Leader.
3. Isolde Coordinator's report.
4. Identification and decay studies of new, neutron-rich isotopes of bismuth, lead and thallium by means of a pulsed release element selective method; CERN/ISC 96-1/P76: K. Rykaczewski.
5. Search for detour transitions in the radiative EC decay of ^{81}Kr ; CERN/ISC 96-2/P77; M. Pfützner.
6. Single-neutron states in ^{133}Sn : Status report and beam time request (IS 338); CERN/ISC 96-6/P53 Add.1; P. Hoff.
7. Neutron-rich silver isotopes produced by a chemically selective laser ion-source: Status report on experiment IS333 part II and request for beam time; CERN/ISC 96-4/P34 Add.1; K.-L. Kratz.
8. Nuclear electrical and optical studies of hydrogen in semiconductors (IS345); CERN/ISC 96-3/P65 Add.1; D. Forkel-Wirth.

Closed session

after the Open Session, 6th Floor Conference Room, Main Building.

Lundi 12 février

UMTF COMPUTING TUTORIALS

14.00-16.00 h – Amphithéâtre CN, bât. 31/3-004&5

Comment faire la configuration de votre Environnement Shell UNIX

par Arnaud TADDEI

Ce cours est consacré à l'interface utilisateur principal d'un système UNIX: le shell. Etant donné la diversité de comportement d'un tel objet il est devenu nécessaire d'en sélectionner et d'en recommander un sous-ensemble. Par conséquent je limiterai le sujet de ce cours en répondant aux questions suivantes:

- Qu'est-ce qu'un shell et comment l'utiliser ?
- Qu'est-ce que l'on peut configurer et comment ?
- Qu'est-ce que l'environnement HEPiX représenté au CERN ?
- Qu'est-ce qu'il ne faut pas faire ?
- Où peut-on trouver d'autres sources d'information ?

Il n'y aura pas de copies des transparents sur place. Ils sont disponibles sur le Web à l'adresse

<http://wwwcn.cern.ch/umtf/training/96-02-12/>

Vous pouvez les lire et/ou imprimer avant ou après le cours.

Ce séminaire sera donné en français.

Wednesday 14 February

TECHNICAL PRESENTATION

10.00-11.00 hrs and 14.00-15.00 hrs – bldg 304/1-001, room B

WEKA Cryogenic Valve with Intelligent Electropneumatic Positioner SIPART PS

Presentation given by WEKA AG, CH in co-operation with Siemens Schweiz AG, Bereich Automatisierungstechnik, D and VonRohr Armaturen AG, CH

It includes talks and explanations with future outlook of WEKA cryogenic valves with intelligent electropneumatic positioner Siemens SIPART PS mounted sidewise or top of - and as future outlook, integral in - VonRohr pneumatic diaphragm actuators. Also some information's about fieldbus in process industries - actual solutions with HART protocol and expecting future with full integrated BUS systems - will be given.

The presentation is directed to all interested people working in cryogenics or connecting relations.

Information : Laszlo ABEL / FI-A/9561

Language : English, questions : English, French or German

Wednesday 14 February

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

The non-linear dynamics of QFT and the reheating of the inflationary universe

by H.J. DE VEGA / Université Paris VI

We show how the energy stored in the zero mode of a quantum scalar field (the "inflaton") is dynamically transformed into a gas of particles when the field rolls down a potential hill (dissipation through particle production). We do that using the Schwinger-Keldysh closed time path method combined with non-perturbative large N limits as well as perturbative methods (amplitude expansion). The implications for the reheating stage at the end of inflation will be discussed. Explicit results for a self-coupled scalar field model and for a scalar coupled with a lighter scalar and with fermion fields will be presented. These field theory methods apply in addition to heavy ion collisions and to pion and quark-gluon physics.

Wednesday 14 February

CAS ACCELERATOR SEMINAR

at 14.30 hrs – Auditorium

The Eleventh Lecture

in the John Adams' Memorial Lecture Series

Light- and heavy-ion acceleration at CERN

by Helmut HASEROTH / CERN

The acceleration of lead ions was one of the most important events at CERN last year. Apart from upgrading the existing circular accelerators, a completely new linac with RFQ and ECR source was built by a collaboration involving many outside laboratories. The present scenario, including the choice of parameters and modifications to our machines, has been strongly influenced by the history of ions at CERN as well as by our external contributors. The reasoning behind the choice of the principal components of the linear accelerator is discussed, and the implications and modifications to other CERN accelerators are reviewed.

* *Tea and coffee will be served after the lecture in the Salle des Pas perdus*

Thursday 15 February

UMTF COMPUTING TUTORIALS

10.00-12.00 hrs – CN Auditorium, bldg 31/3-004&5

Windows and NICE as your desktop environment

by David FOSTER

This presentation is directed towards users who are considering the PC running Windows as their preferred desktop environment. The concepts of NICE will be described and the managed services presented together with their future evolution.

Thursday 15 February

SL SEMINAR

at 16.00 hrs – SL Auditorium, Prévessin, bldg. 864

Ponderomotive Oscillations in the LEP

Superconducting Cavities

by J. TUCKMANTEL / CERN-SL

The forces exercised by the RF field on the cavity walls are known to be capable to excite mechanical cavity oscillations under special conditions. We will discuss the driving instability mechanism and the instability conditions, methods to inhibit oscillations and the approach chosen for the LEP sc cavities. The repercussions of this choice, increased RF power and stronger power coupler loading increasing the danger of multipacting again, are discussed as well as possible remedies to some of them.

* *Tea and coffee will be served at 15.30 hrs in front of the auditorium*

Friday 16 February

CERN COMPUTING COLLOQUIUM

at 14.00 hrs – Auditorium

The MBone: Enabling Live, Multiparty, Multimedia Communication on the Internet

by Steve DEERING / Xerox PARC

The Multicast Backbone (MBone) is an infrastructure for supporting efficient one-to-many communication over the Internet. Established in early 1992, the MBone has quickly grown to reach more than 2500 networks in 25 countries. The availability of the MBone has catalyzed the development of many new Internet applications, especially real-time, multimedia applications such as audio/video teleconferencing, remote teaching, distributed interactive simulation, and "Internet Radio/TV". This talk will describe how the MBone works, how it is being deployed, how it is likely to evolve, and what research problems stand in the way of that evolution.

Steve Deering is a member of the research staff at Xerox PARC, engaged in research on advanced internetwork technologies, including multicast routing, mobile internetworking, scalable addressing, and support for multimedia applications over the Internet. He is the lead designer of the next generation Internet Protocol, IPv6. He received his B.Sc.(1973) and M.Sc.(1982) from the University of British Columbia (Canada) and his Ph.D. (1991) from Stanford University (USA).

Monday 19 February

COMPUTING SEMINAR

at 14.00 hrs – CN Auditorium, bldg 31/3-004&5

A Review of Scientific Visualization Systems

by Steve LARKIN / Computer Graphics Unit, Univ. of Manchester

The seminar will first present an overview of the different classes of scientific visualization systems available and will discuss the various products currently in the marketplace. The latter part of the talk will focus upon current and future trends which will include the next generation of visualization systems, database integration and support for parallel and distributed architectures.

Organiser : G.Folger / CN

* *Please note unusual day and time*

Tuesday 20 February

TECHNICAL PRESENTATION

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

The Cesar-5 MultiComputer, a supercomputer built from desktop technology

by H. BUGGE / Corporate Technologist, Kongsberg Informasjonskontroll (KIK), Norway

Thursday 22 February

TECHNICAL PRESENTATION

at 09.00 hrs – CN Auditorium, bldg 31/3-004&5

New tools for software development

by Olivier HARTMANN / SGI, Switzerland