

Date limite pour le renouvellement des anciennes cartes : 30 septembre 1987.

Pour la Commission TIS
K. Potter

Pour le Comité Hydrogène et Gaz Inflammables
V. Sergo

Deadline for the renewal of gas cards: 30 September 1987.

For the TIS Commission
K. Potter

For the Hydrogen and Flammable Gases Committee
V. Sergo

SEMINARS SEMINAIRES

Monday 30 March

TECHNICAL PRESENTATION

from 14.00 to 16.00 hrs – LEP Auditorium
bldg 30, 7th floor

The Control Data Corp. CYBER 930

by Roger LANGLEY / Control Data Corporation, Minneapolis

Control Data Corporation (USA), represented by Control Data (Suisse) SA, will introduce the CYBER 930, a small, powerful system in the CYBER 180 family designed to operate uniquely under the NOS/VE operating system. The CMOS circuit technology used to build the CYBER 930 permits a very compact design with very low power consumption. All I/O channels have direct memory access with maximum rates of 20 Mbytes per second, thus providing an extremely powerful I/O subsystem.

Language : English

Information : M. Diraison / FI / 4585

Tuesday 31 March

PROJECT 'ATHENA' (All-day Special Forum)

from 10.00 to 16.00 hrs – DD Auditorium
bldg 31, 3-005

Please note unusual day and place

Project Athena originated in May 1983, when MIT announced the establishment of a five-year program to explore new, innovative uses of computing in the MIT curriculum. The MIT faculty was concerned that too little was being done to integrate the new computational technology into undergraduate educational experience. Project Athena's goal is to improve the quality of education at MIT by fostering innovative uses of a network of high-performance computer-graphics workstations. Since May 1983 the project has come a long way; this seminar will give an overview of the project history and discuss the progress made in networking and workstations.

PROGRAMME

10.00 Athena Program Overview

10.45 Athena Technology

11.30 Athena Distributed Systems

12.15 Lunch break

13.30 X-Windows and Toolkits

14.15 Video Workstations

15.00 Athena Impact on Education

15.45 End of Presentation

William Hogue (MIT): Assistant Director, Project Athena
Rus Gant (MIT): Director, Video Applications Development
Karen Cohen (MIT): Director, Evaluation Studies
George Champine (DEC): Associate Director, Project Athena
Tony DellaFerra (DEC): Project Athena
Ralph Swick (DEC): Project Athena

Tuesday 31 March

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

Evidence on neutral B meson mixing at PEP (MAC)

by F. MULLER / CERN and SLAC

A search for the effect of neutral B meson mixing has been performed using dimuon events in electron-positron collisions at 29 GeV total energy, with an integrated luminosity of 310 pb^{-1} . Despite the limited statistics, a measurement of the parameter

$$\chi = \Gamma(B \rightarrow \mu^-) / \Gamma(B \rightarrow \mu^\pm)$$

and a positive 90% C.L. lower limit of χ are obtained, thanks to the excellent knowledge of the final state, proper to electron-positron collisions, and to the high sensitivity to mixing of a practically pure BB sample. These results will be compared with other reported values.

* Tea and coffee will be provided at 16.00 hrs.

Mercredi 1 avril

PRESENTATION TECHNIQUE

de 09.30 à 12.00 h – Amphithéâtre du LEP
bât. 30, 7e étage

MOTOROLA (Suisse) SA, Groupe Semiconducteurs, propose une conférence ayant pour thème le DIGITAL SIGNAL PROCESSOR DSP56000 family, dont les premiers échantillons apparaissent aujourd'hui sur le marché. Présentation par Monsieur Eric CHEVAL, spécialiste européen de Motorola pour les applications DSP.

Wednesday 1 April

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Aspects of bosonization in string theory

by E. RABINOVICI / CERN

Various modular bosonic and fermionic conformal models are considered. In particular we exhibit relations between Ising models and orbifolds, representations of non-simply laced groups and orbifolds. We show that fermionic models with $O(2n) \times O(2n)$ symmetry are equivalent to bosonic strings moving in a non-zero constant torsion background. Some issues related to compactification and the nature of the higher dimensions are discussed.

Wednesday 1 April

CERN COMPUTER SEMINAR

at 16.00 hrs – Auditorium

Alan Turing : the development of his ideas

by Andrew HODGE / University of Oxford

Alan Turing (1912-1954) described the concept of the Turing machine in 1936. Although the immediate application of the concept was to mathematical logic, Turing was primarily concerned with finding a proper description of mental operations. The Turing machine description led him in 1945 to the design of the electronic computer, to the art of computer programming, and to the thesis of 'intelligent machinery'. The talk will discuss the development of his ideas.

Andrew Hodges (Ph.D. London, 1975) now holds an Advanced Fellowship of the UK Science and Engineering Council, at the Mathematical Institute, University of Oxford. His doctoral and post-doctoral work has been on the twistor theory originated by Roger Penrose, particularly on its application to quantum field theory. He is also the biographer of Alan Turing.

* Tea and coffee will be provided at 15.30 hrs.

Thursday 2 April

CERN COLLOQUIUM

at 16.30 hrs – Auditorium*

Evolution of the micro-electronics technology opportunities for Europe

by R. van OVERSTRAETEN / IMEC, Leuven

Micro-electronics has been characterized by a rapid technological evolution. Through reduction of feature sizes, the packing density and the performance increase continuously, the cost decreases and the field of application expands. It is expected that this evolution will continue based on further decrease of dimensions, on new device structures and on the use of materials other than silicon. The results of process technology development, are not only useful for VLSI, but also for sensors, detectors, power devices, solar cells, etc. Application specific integrated circuits now are important due to the advances made in computer aided design methodologies. Specific silicon compilers already exist and reduce the design time considerable. ASICs will have a large impact on many industries. They lead to application specific computers, to image computers, etc. The pace of introduction of ASICs is determined by the efforts on training. It will be shown that Europe continuously has new opportunities based on this evolution.

* Tea and coffee will be provided at 16.00 hrs.

Monday 6 April

PRESENTATION

10.00 hrs – DD Auditorium

bldg 31, 3-005

Introduction to the NEC Supercomputer, SX system

by A. IWAYA / NEC

The talk will cover technical details of the NEC SX Supercomputer, six of which have been delivered, including one in the US.

Monday 6 April

EF SEMINAR

at 11.00 hrs – EF Conference Room

bldg 13, 2-005

Test of an electromagnetic calorimeter using BaF₂ scintillators and photosensitive wire chambers

by Philippe MINÉ / CERN and Ecole Polytechnique de Palaiseau

The principle of an electromagnetic calorimeter based on the BaF₂ fast scintillation, detected by photosensitive low pressure MWPC, is described. We present the results of a test performed with our prototype in a 1 to 9 GeV beam. The salient performances are an energy resolution of $4\%/\sqrt{E}$, a position resolution of 1 mm, and a time resolution better than 1 nsec. The high rate capability is also an interesting property for future experiments.

Tuesday 7 April

MEETING ON FASTBUS DEVELOPMENTS

at 09.00 hrs – TH Conference Room

1. FASTBUS developments for OPAL at the University of Freiburg
by Ch. WEBER / University of Freiburg
2. The ALEPH data acquisition system
by W. von RÜDEN / CERN
3. The ALEPH event builder, multi-user aspects
by A. MARCHIORO / CERN
4. Further developments on the FASTBUS Standard
by P. PONTING / CERN
5. A.O.B.

Wednesday 8 April

DD SEMINAR

at 16.00 hrs – DD Auditorium

bldg 31, 3-005

The new digital telephone exchange

by Bryan EVERSLED / CERN-DD

Thursday 9 April

CERN COLLOQUIUM

at 16.30 hrs – Auditorium

Supernova 1987A : light and neutrino observations

by David N. SCHRAMM / University of Chicago, Fermilab, and Max-Planck Institute, Munich