

BIENS APPARTENANT AU CERN

Il est rappelé que les biens appartenant à l'Organisation qui sont acheminés via le tunnel reliant les différentes parties du domaine du CERN doivent être accompagnés d'une Fiche de transfert signée par un membre du personnel du CERN et jamais par un employé d'entreprise.

Le passage par les postes-frontière habituels n'est pas autorisé même avec une Fiche de transfert. En cas d'inobservation de cette règle les contrevenants risquent des amendes de la part des Douanes. Dans ce cas, l'Organisation ne pourra pas intervenir en leur faveur.

Dir. Adm.
Tél. 5152

GOODS BELONGING TO CERN

You are reminded that goods belonging to the Organization which are transferred through the tunnel from one part of the CERN site to another must be accompanied by a transfer slip signed by a member of the CERN personnel, never by a firm's employee.

Transfers through the usual border posts are not authorized, even with a transfer slip. Anyone contravening this rule runs the risk of being fined by Customs. In such cases, the Organization will not be in a position to intervene on their behalf.

Dir. Adm.
Tel. 5152

SEMINARS SEMINAIRES

Monday 24 November

EF SEMINAR

at 11.00 hrs – EF Conference Room
bldg 13, 2-005

Fixed target physics with the Omega spectrometer

by W. BEUSCH / CERN

Since the upgrade of the West Area (finished in 1983) 8 different experiments have been performed with the Omega. Some highlights of the experimental techniques used and of the physics of these experiments will be presented.

Monday 24 November

EP SEMINAR

at 16.30 hrs – Auditorium

The electron neutrino studied in inner-bremsstrahlung experiments : progress and prospects

by P.G. HANSEN / CERN and University of Aarhus

Internal bremsstrahlung in electron-capture beta decay and related non-radiative processes offer the best experimental possibility for setting an upper limit to the mass of the electron neutrino. Provided that suitable ('resonant') cases are discovered there is even, as pointed out by De Rújula, a theoretical possibility that this method might surpass the tritium experiments, the canonical method for determining the mass of the electron antineutrino. The seminar will summarize the theoretical background, experimental checks on bremsstrahlung theory, the status of the search for resonant cases, and the possibility of developing new high-resolution methods with greatly increased sensitivity to $m(\nu_e)$.

Mardi 25 novembre

PRESENTATION TECHNIQUE

de 09.30 à 16.00 h – Amphithéâtre LEP
bât. 30, 7e étage

WALTER RENTSCH SA (CH), représentant CANON (J/D), propose en exposition/démonstration la nouvelle gamme de photocopieurs et télécopieurs Canon.

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Télécopieur sur papier normal.

Langues : anglais, français

Renseignements : M. Diraison / FI / 4585

Tuesday 25 November

CAS ACCELERATOR SEMINAR

Postponed to Thursday 27 November

Tuesday 25 November

PRESENTATION

at 15.00 hrs – DD Auditorium
bldg 31, 3-005

The Compaq Deskpro 386 – a new generation of PCs

by Walter FINK / Compaq Computer GmbH

The new Intel processor chip 80386 really delivers what the 80286 already promised conceptually : full virtual machine capability. Many people now want to utilize the advantages of this chip. Compaq has been among the

first to offer a PC based on this chip. Its main innovation is to make maximum use of the features of the 80386 while maintaining compatibility to the PC industry standard based on 8086/80286 software. Compaq's deskpro 386 thus allows new applications to be implemented at PC level while at the same time it supports the entire existing PC software base. The internals of the Compaq machine will be explained, the PC operating systems arena will be discussed and some network/multi-user performance data will be given.

Wednesday 26 November

PS SEMINAR

at 11.00 hrs – PS Auditorium
bldg 6, 2-024

Advanced technology arising from particle physics

by O. BARBALAT

In order to build Accelerators and Detectors, Particle Physics uses a variety of advanced techniques in the field of heavy and light mechanical and electrical engineering, vacuum, surface and material science, electronics and computing. It has often prompted new developments in order to enhance their performance. These techniques are reviewed with particular emphasis on already commercial or potential applications in other fields.

Wednesday 26 November

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Automated reasoning

by B. HUMPERT / University of Lausanne and
HASLER Research Laboratories

Automated Reasoning has grown out of the field Automated Theorem Proving (ATP) which allows for the logical derivation of a conjecture from a set of axioms. After an introduction to first-order logic and Robinson's Resolution Principle we present a few typical examples in mathematics and subsequently discuss the variety of completed ATP applications in other fields.

Thursday 27 November

PRESENTATION

at 15.00 hrs – DD Auditorium
bldg 31, 3-005

TARGON 35 Presentation

by B. CLARK / Nixdorf Computer AG

Nixdorf Computer AG offers a line of high performance Supermini computers in the range of 3.2 – 12 MIPS specifically designed to run the UNIX operating system. The computer's innovative architecture is based on the Reduced Instruction Set Computer (RISC). The operating system is the only one to combine complete versions of both BSD 4.2 and AT&T System V in a single operating system. A full description of the computer's hardware and available software will be given and two application areas, Data Base Management and Software Development, will be discussed.

The speaker

Brian Clark is a Director of the UK UNIX Users Group, with over five years' experience in the UK UNIX industry in both hardware and software engineering.

Thursday 27 November

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

New results on nucleon structure function and tests of QCD from the BCDMS experiment

by R. VOSS / University of Munich

The Bologna - CERN - Dubna - Munich - Saclay Collaboration (NA4 experiment) has done a series of high statistics measurements of the nucleon structure functions $F_2(x, Q^2)$ and R in the high Q^2 regime (Q^2 above 10 GeV^2). Results from these experiments, which are partly preliminary, will be presented. The kinematic range of these data makes them well suited for comparisons to perturbative QCD which will be discussed in detail. Comparisons will also be made to data from other experiments.

* Tea and coffee will be provided at 16.00 hrs.

Thursday 27 November

Please note change of date!

CAS ACCELERATOR SEMINAR

at 14.30 hrs – Auditorium*

The second lecture in the John Adams' Memorial Lecture series

Accelerators and superconductivity : a marriage of convenience

by Martin WILSON / Special Projects Manager at Oxford Instruments Ltd

High energy physics laboratories have maintained a long and fruitful involvement in the development of superconducting technology, starting with the early bubble chambers, moving onto synchrotron magnets and, most recently, rf cavities. This lecture will concentrate on synchrotron magnets, showing how their special requirements have brought about

significant advances in the technology, particularly the development of filamentary superconducting composites. Such developments have made large superconducting accelerators an actuality : the Tevatron in routine operation, HERA under construction and the SSC and LHC at the conceptual design stage. They have also facilitated other applications of superconductivity, for example medical imaging and even small accelerators.

The speaker

During the late 1960s and early 1970s whilst at the Rutherford Laboratory, Martin Wilson played a major role in the development of a superconducting cable which is now often referred to as the Rutherford cable. At present he is Special Projects Manager at Oxford Instruments Ltd.

* Tea and coffee will be provided after the lecture at about 16.00 hrs.

Friday 28 November

PRIAM PRESENTATION

10.00 to 12.00 hrs – DD Auditorium,
bldg 31, 3-005
14.00 to 17.00 hrs – DD Conference Rooms 1, 2
and 3, bldg 600 (bldg 31 annex)
(See programme below)

VMEbus blanket purchase contracts

by Chris ECK and PRIAM Project Leaders

The PRIAM Project (CERN Interdivisional Project for Microprocessor Support), in collaboration with the CERN Finance Division and a representative committee of VMEbus users at CERN, has negotiated a blanket purchase contract with three major companies for the supply and support of general purpose VMEbus modules. These contracts have been set up to provide the CERN VMEbus user community not only with improved conditions for the purchase of equipment, but also for its subsequent repair and technical support. This meeting is being held to present to CERN users the scope of these contracts and the mechanisms for their use. In addition, the chosen companies will present their products, which are the subject of the contracts.

Programme

10.00-10.30 Introduction to the principle and functioning of the blanket purchase contracts
by Chris ECK and PRIAM Project Leaders
10.30-11.00 Product presentation : Company No. 1
11.00-11.30 Product presentation : Company No. 2
11.30-12.00 Product presentation : Company No. 3
14.00-17.00 Informal discussions and technical presentations in DD Conference Rooms 1, 2 and 3.

Language : English

Tuesday 2 December

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium

Design and status at Serpukhov of UNK accelerators

by A. VASSILIEV / IHEP, Head of Accelerator Department, USSR State Committee

Wednesday 3 December

CERN COMPUTER SEMINAR

at 16.00 hrs – Auditorium

A rational design process : How and why to 'fake it'

by David L. PARNAS / Queen's University,
Kingston, Ontario, Canada

TRAINING AND **EDUCATION** **ENSEIGNEMENT**

ENSEIGNEMENT GENERAL

Tél. 2844

Jeudi 27 novembre

de 13.00 h à 13.30 h – Amphithéâtre

Science pour tous

par R. CARRERAS

ACADEMIC TRAINING

Tel. 2844-3364

24, 25 November

11.00 to 12.00 hrs – Auditorium

Computer-aided engineering in mechanics

by R. DASSLER / CONTRAVES, Zurich

26, 27 and 28 November

Computer-aided engineering in electronics

by P. DE WILDE / Technological University,
Delft

3 and 4 December

Epistemology

by K. POPPER / University of London

*These lectures have been CANCELLED
(for health reasons)*

Mardi 2 décembre

LES SCIENCES AUJOURD'HUI

à 20.00 h précises – Auditorium

(jusqu'à environ 22.00 h)

par R. CARRERAS

Rafel Carreras, responsable du programme d'Enseignement général au CERN, commentera et expliquera un choix d'articles parus récemment dans des revues scientifiques, et qui couvrent l'ensemble des sciences physiques et biologiques ainsi que certains aspects des relations science-société. Une attention particulière est portée au langage et aux notions utilisés afin que les explications et les commentaires soient accessibles aux personnes n'ayant pas de formation scientifique.

Entrée libre

(Please note that the lecture will be given in FRENCH)

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