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Vous êtes priés de bien vouloir accepter de bonne grace toute interruption occasionnelle et brève de l'écoulement du trafic qui en résulte, et de permettre ainsi aux gardiens de faire leur travail.

Groupe des services généraux/AS

OFF-PEAK SITE ACCESS CONTROL

All users of the CERN sites are reminded that the site guards have strict instructions to lower the barriers at off-peak times, in order to facilitate checks on vehicles and persons entering or leaving the sites. These measures are designed to protect the Organisation's property and personnel working here.

You are asked to allow the guards to do their job by accepting, with good grace, any resulting occasional brief interruption in traffic-flow.

General Services Group / AS

SEMINARS SEMINAIRES

Monday 5 November

STING (SOFTWARE TECHNOLOGY INTEREST GROUP) TECHNICAL PRESENTATION

from 09.00 to 12.30 hrs – CN Auditorium
bldg 31, 3-005

StP (Software through Pictures)

by Dave SHEWMAKE / IDE Inc.

StP is a set of CASE (Computer Aided Software Engineering) products produced by IDE (Interactive Development Environments, San Francisco). After a short introduction of the company and its products, the presentation will focus on the support StP provides for the various phases of the software life-cycle : analysis, design, code, test and maintenance.

Also IDE's developments towards object oriented structured design (OOSD) will be presented.

The tentative program will be :

09.00-09.15 Welcome and introduction of the Company

09.15-10.15 The product : modules covering the software life cycle; how do modules fit together; examples

10.15-10.45 Coffee break

10.45-11.45 Organized demonstration

11.45-12.30 Informal discussions and demos for those interested

The presenters and their equipment will also be available after lunch for further discussions.

Monday 5 November

PPE SEMINAR

at 16.30 hrs – Auditorium

Feasibility of a high precision measurement of the energy of an electron beam using Moeller scattering

by P. GALUMIAN / University of Lausanne & CERN

A method to measure with high accuracy the energy of an electron beam is presented. The method is based on the Moeller scattering of the beam electrons from the electrons of a fixed target. The feasibility of the method has been analysed for the LEP beam at the energy of 47 GeV using an internal hydrogen gas jet target. The Monte Carlo simulation of the process, which takes into account the experimental parameters as well as the radiative corrections has been done. The results obtained from appropriate analysis show that an absolute precision of the energy measurement up to the level of $\delta E/E = 10^{-5}$ is feasible.

Tuesday 6 November

LEP EXPERIMENTS COMMITTEE

at 09.00 hrs – Auditorium

Open session

- 09.00-10.00 *Report on Cogne VI (J. Haïssinski)*
10.00-10.40 *Status of LEP : evidence for beam polarization (S. Myers, B. Dehning)*
10.40-11.00 *Coffee break*

Status reports on the experiments and requests for the 1991 run up to the end of June

- 11.00-11.30 *L3*
11.30-12.00 *ALEPH*
12.00-12.30 *DELPHI*
12.30-13.00 *OPAL*
14.30-14.50 *LEP5 (G. Diambri-Palazzi)*
14.50-15.10 *LEP6/MODAL (J.L. Pinfold)*
15.10-15.30 *Proposal, Installation of a pair spectrometer in LEP straight Section 1 (CERN - Rochester - Trieste - Udine Collaboration; CERN/LEPC 90-13/P6 (A. Melissinos)*
15.30-16.00 *Report on SLC (M. Breidenbach)*
16.00-16.30 *Tea break*

Closed session

6th floor Conference Room, Admin. bldg,
to be continued on Wednesday 7 November
at 09.00 hrs, same place

Tuesday 6 November

STING (SOFTWARE TECHNOLOGY INTEREST GROUP) TECHNICAL PRESENTATION

from 09.00 to 12.30 hrs – CN Auditorium
bldg 31, 3-005

RTEE (Real Time Engineering Environment)

by Westmount Technology BV, Delft

This presentation will focus on the Westmount strategy with respect to CASE Environments. After a short overview of current Westmount CASE products, their main features will be discussed. Special attention will be paid to the major characteristics and advantages of Westmount tools. This will also serve as a survey of the state of the art in CASE technology. Some new developments taking place within Westmount will be highlighted. The presentation will emphasize the following topics :

- *documentation tools*
- *project management tools*
- *object-oriented developments*

The tentative program will be :

- 09.00-09.15 *Welcome and introduction of the Company*
09.15-10.15 *The product : modules covering the software life cycle; how do modules fit together; examples*
10.15-10.45 *Coffee break*
10.45-11.45 *Organized demonstration*
11.45-12.30 *Informal discussions and demos for those interested*

The presenters and their equipment will also be available after lunch for further discussions.

Wednesday 7 November

CN TECHNICAL PRESENTATION

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

nCUBE the World's Fastest MIMD Computer

by Peter WUSTEN & M. HALL / nCUBE
Germany, R. BASSIN / Vice President Sales,
nCUBE USA

PROGRAMME

- 10.00 *The nCUBE Architecture, P. Wusten, Managing Director, nCUBE Germany*
10.45 *Programming Distributed Memory Systems, M. Hall, Staff Scientist, nCUBE Germany*
11.15 *ORACLE on nCUBE R. Bassin, Vice President Sales, nCUBE USA*
11.45 *Discussion*

nCUBE (Manufacturers' description)

The nCUBE 2 is the world's fastest computer. Deriving its great speed from inexpensive, custom components, it offers the best price/performance ratio of any computer available today. The nCUBE 2 Series consists of a variety of models of general-purpose, software compatible systems that span the widest performance range in the computer industry : a 1000x differential from the smallest model to the largest. This performance range allows users to run an unprecedented variety of applications, from those requiring only a few processors to those requiring thousands, on a single computer.

ORACLE on nCUBE

There is a growing need for large, high performance data bases. Current systems using conventional computer architectures do not provide sufficient solutions to these needs. The only promising computer architecture offering scalable performance is the architecture of massively parallel system of the market. ORACLE has developed new techniques to adapt the ORACLE RDBMS to the nCUBE architecture. The first demonstrations and performance measurements show very positive results.

Language : English

Organizer : S. Jarp / SVERRE@CERNVM

Wednesday 7 November

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

The origin and geometrical meaning of quantum groups

by C. GOMEZ / Salamanca

Wednesday 7 November

COMPUTER SEMINAR

at 16.00 hrs – Auditorium*

The use of ADA in a distributed real-time system

by Lars ASPLUND / Uppsala University

The programming language ADA was defined in the early '80s, and includes features which should make it attractive to high-energy physicists, particularly for online applications. Certified compilers now exist for a wide range of systems, but physicists have been reluctant to adopt ADA. There is little ADA experience in the scientific community, and suspicion that some of the features, particularly the tasking, will not work well in large real-time applications. We present results of a study of ADA under realistic application conditions.

Lars Asplund has studied physics at Uppsala University, Sweden. Currently he is an assistant professor at the Department of Computer Systems in Uppsala. His research is focused on real-time systems, embedded systems and software engineering.

* Tea & coffee will be served at 15.30 hrs.

Jeudi 8 novembre

PRESENTATION TECHNIQUE

de 14.00 à 16.30 h – Amphithéâtre LEP
bât. 30, 7e étage

Calculateurs temps réel DUNE 3000

DUNE TECHNOLOGIES (F) est un constructeur de calculateurs destinés aux applications industrielles, scientifiques et de défense. Le DUNE 3000, calculateur temps réel d'une nouvelle génération, offre la synthèse entre promptitude extrême, déterminisme, puissance de calcul et fonctionnalités générales. C'est un multiprocesseur à mémoire commune. Le système d'exploitation assure l'équilibrage automatique de la charge. Le matériel assure dynamiquement la distribution des interruptions aux processeurs. L'aspect multiprocesseur de la machine est invisible pour l'utilisateur. Le système d'exploitation multiprocesseur symétrique, DUNE-iX, est un exécutif temps réel à très haute performance, entièrement optimisé en fonction des priorités des tâches. De plus, il est strictement compatible avec UNIX System V.3 aux niveaux source et binaire. DUNE-iX est la première implantation d'UNIX capable de supporter simultanément l'exécution d'applications les plus générales et celles du 'temps réel dur'. Le DUNE 3000, calculateur ouvert, intègre pleinement les standards de l'industrie : format et bus VME, processeurs MC 68030, compatibilité UNIX, C, C++, FORTRAN, ADA, Ethernet, TCP/IP, X-WINDOW, etc.

Langue : français

Renseignements M. Diraison / FI / 4585

Friday 9 November

PPE DETECTOR SEMINAR

at 11.00 hrs – Conference room
bldg 13, 2-005

Methods for developing ultra-stable structures

by T. THOMPSON / Los Alamos National Laboratory

This presentation will discuss the scientific methods used by LANL for developing ultra-stable structures. The design methodology based upon computational and experimental techniques will be explored, as well as a prototype that demonstrated stability greater than 1 micro-radian.

Friday 9 November

MEETING ON

PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

Using neutral networks to identify jets and particles decaying into jets

by Leif LÖNNBLAD / (University of Lund)

Friday 9 November

CN TECHNICAL PRESENTATION

at 14.00 hrs – CN Auditorium
bldg 31, 3-005

ALDEC SUSIE Logic Simulator & VHDL Modelizer Tools

by Stanley HYDUKE / President of ALDEC Corporation

*This presentation will be given by Stanley Hyduke, president of ALDEC Corporation, Newbury Park, California together with the French distributor, SYSTEM H. Mr Hyduke is an expert in the area of digital design simulation and VHDL modelling. He is at present marketing his SUSIE real time simulator. This program has its origins in the PC-DOS area, but it is foreseen to port the software to the UNIX world on SUN3, SUN4 and IBM RS 6000 working stations. More than ten PC CAD suppliers, including CADAM / P-CAD, have licensed this software for integration into their packages. VHDL models for SUSIE are available through the ITEX exchange program. ITEX, which is a daughter company of ALDEC, was set up to facilitate the writing, validation and exchange of VHDL simulation models, as well to handle their marketing aspects. The American Department of Defence now requires all ASIC suppliers to provide VHDL definitions for their products, which gives a clear lead for the future. Unfortunately, the VHDL language is complex and can be difficult to use. Mr Hyduke thinks that the biggest obstacle facing VHDL acceptance is the user interface. and quotes 'Users should not have to learn the language to use it, just as hardware designers can use the microprocessor without having to learn all of its intricacies'.
Schedule :*

14.00	SYSTEM H's design chain presentation
14.20	ALDEC's products presentation
14.30	SUSIE presentation
15.30	ITEX and the VHDL models
16.15	Questions

Language : English

Organizers : R.B. Flockart & J.-M. Sainson / CN

Monday 12 November

PPE SEMINAR

at 16.30 hrs – Auditorium

Polarization measurements at LEP

by Bernd DEHNING / Max-Planck-Institut – LEP Polarization Group

Polarization studies at LEP started at the last run and will be continued next year with the aim to improve the beam energy calibration. Furthermore, the longitudinal polarization program for LEP will depend on the attainable degree of polarization. The recent measurements will be presented and discussed. An outlook will be given for the next run schedule.

Tuesday 13 November

PROTON SYNCHROTRON AND SYNCHRO-CYCLOTRON COMMITTEE AND SPS EXPERIMENTS COMMITTEE

Open session

at 09.00 hrs – Auditorium

LEAR

1. Status report on PS 170 (Precision measurement of the proton electromagnetic form factors in the time-like region and vector meson spectroscopy; P. Dalpiaz).
2. Status report on PS 200 (Measurement of the gravitational acceleration of the antiproton; M.H. Holzschneider).
3. Status report on PS 201 (Study of $\bar{p}$ and $\bar{n}$ annihilations with OBELIX; T. Bressani).
4. Status report on PS 202 (JETSET: Physics at LEAR with an internal gas jet target and an advanced general purpose detector; M. Ferro-Luzzi).
5. Extension of Experiment PS 199 (Further study of the spin structure of the $\bar{p}N$ scattering at LEAR; Cagliari (Univ./INFN) - Saclay (CEN DPhN and LNS) - Trieste (Univ./INFN) - Turin (Polytechnic/INFN/Univ.) Collaboration; PSCC 90-16/P 93 Add.2; F. Bradamante).

SPS

6. Status report on and extension of Experiment NA 46 (Darmstadt on hunting in the interaction γ -crystal; Annecy LAPP-Lyon IPNL-Turin (Univ./INFN)-Udine (Univ./INFN) Collaboration; SPSC 90-34/P 241 Add.2; M. Guàrdà).
7. Addendum to NA 43 (Investigations of the coherent hard photon yields from (50-300) GeV/c electrons/positrons in the strong crystalline fields of diamond, silicon and germanium crystals; Aarhus - Strasbourg CRN - Florence (Univ./INFN) - Univ. of Witwatersrand Johannesburg - Yerevan Collaboration; SPSC 90-31/P 234 Add.3; E. Uggerhøj).

Closed Session

at 14.00 hrs – Conference Room 6th Floor, Administration Building;
to be continued on Wednesday 14 November at 09.00 hrs.

Tuesday 13 November

CN TECHNICAL PRESENTATION

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

New performance solutions in the VAX environment

by B. HUBER / General Manager for Germany, Switzerland and Austria, System Industries A.G., München, R. GAILLARD / Service Manager for Switzerland, System Industries S.A., Geneva & J. HORAN /

Consultancy Services Manager, System
Industries, Woking

Language : English
Organizer : A. Silverman / CN

Wednesday 14 November

CN TECHNICAL PRESENTATION

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

New VAXes from Digital

by Pierre DYSLI

Language : English
Organizer : C. Parkman / CN / PMN@CERNVM

Jeudi 15 novembre

PRESENTATION TECHNIQUE

de 10.00 à 12.00 h et de 14.00 à 16.00 h
bât. 17, 1-007

Présentation de Alcatel CIT (F) : appareils de mesure de basses pressions, les manomètres électroniques série Pascal.

Démonstration de Métra-Céram (F), spécialiste de l'utilisation des céramiques techniques.

Langue : français
Renseignement : M. Diraison / FI / 4585

TRAINING AND EDUCATION ENSEIGNEMENT

Mardi 6 novembre

LES SCIENCES AUJOURD'HUI

à 20.00 h précises – Amphithéâtre
(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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ENSEIGNEMENT GENERAL

Tél. 5811 ou 3674 (le matin)

Jeudi 8 novembre

de 13.00 h à 13.30 h – Amphithéâtre

Science pour tous

par R. CARRERAS

ACADEMIC TRAINING

Tél. 2844-3674

5 & 7 November

LECTURES FOR POSTGRADUATE STUDENTS

11.00 to 12.00 hrs – Auditorium

Heavy flavours and CP violation

by P. ZERWAS / Rhein.-Westf. Technische
Hochschule, Aachen

Lectures 2 & 3

12, 15, 19, 21 & 23 November

LECTURES FOR POSTGRADUATE STUDENTS

10.30 to 12.00 hrs – Auditorium

Electro-weak interactions

by R. KLEISS / CERN-TH

An outline of electro-weak precision phenomenology is presented with application to LEP physics :

1. Read the minimal Standard Model
2. Read renormalization
3. Read weak corrections to LEP processes
4. Read QED corrections to LEP processes.