

l'argent ou des objets de valeur. Il est recommandé de garder sous clef l'argent et les petits objets de valeur, qu'ils soient propriété privée ou celle du CERN.

Dir. Adm.
Tél. 5152

containing money or valuables, lying unattended in offices and workshops. Money and small items of value, personal as well as belonging to CERN, should be locked away.

Dir. Adm.
Tel. 5152

SEMINARS **SEMINAIRES**

Monday 28 November

EF SEMINAR

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

Report on the IEEE 1988 Nuclear Science Symposium in Florida

by Tiziano CAMPORESI / CERN-EP

The talk will cover selected topics from the conference which was held from November 9-11 in Orlando, Florida. Emphasis will be placed on presentations concerning detectors.

Monday 28 November

EP SEMINAR

at 16.30 hrs – Auditorium

Observation of large Λ polarization in exclusive diffractive processes at the ISR

by T. HENKES / MPI Heidelberg

We present an analysis of diffractively produced exclusive final states from the experiment R608 at the ISR. The longitudinal alignment of the final state particles with the beam direction observed earlier in $pp \rightarrow [\Lambda\phi K^+]p$ is now also found in $pp \rightarrow [\Xi^- K^+ K^+]p$. In addition the analysis of $pp \rightarrow [\Lambda K^+]p$ shows the same type of alignment as well as a large Λ polarization (up to 80%). All these results are inconsistent with a fireball character of diffractively produced final states and point rather to a longitudinal structure caused by the interaction between beam partons and the exchanged Pomeron. The ensuing hadronization and Λ polarization are described, at least qualitatively, by the Lund String Fragmentation Model.

Mardi 29 novembre

PRESENTATION TECHNIQUE

de 10.00 à 16.00 h – Amphithéâtre I.E.P.
bât. 30, 7e étage

René Faigle SA (CH) propose en démonstration la nouvelle gamme des produits NASHUA (GB, J, NL): photocopieurs 8108, 7112, 8112 RE, 7125, 5130,

7140, 7150 D; télécopieurs F-720, 820, F-730, télécommunication via PC, carte PC-FAX.

Langues : anglais, français

Renseignements : M. Diraison / FI / 4585

Tuesday 29 November

PRESENTATION

14.15 to 17.00 hrs – DD Auditorium
bldg 31, 3-005

Hewlett-Packard Microprocessor Development Tools

by Alain GRAMBERT / Sales Development Manager & Ms Petra.SCHAUBLE / Application Engineer

Hewlett-Packard will present their microprocessor development tools, both hardware and software. The subjects to be discussed include :

- HP64000 future strategy
- Motorola microprocessor support
- new languages and debuggers
- tools for testability
- HP-Teamwork
- emulators.

The formal presentation will be followed by a demonstration and informal discussions.

Information: C. Parkman / DD / **3963**
PMN@CERNVM

Mardi 29 novembre

PRESENTATION

à 15.00 h – bât. 13, R-002

Démonstration de saisie d'images et d'objets au moyen d'une caméra sur Macintosh par Monsieur Jean-Louis Gentilini de la Société Slash SA.

Renseignements : F. Saldana / EP / **7158**

Wednesday 30 November

PS SEMINAR

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

Signal analysis

by D. BOUSSARD / CERN-SPS

This seminar will treat aspects of signal analyses (frequency analysis and filtering) in the accelerator

context, and is based partly on material covered rather too briefly at a recent Accelerator School on beam observation, diagnostics and correction.

Wednesday 30 November

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Quarks, gluons and the spin of the proton

by Jacqueline STERN / CERN

Experimentally, quark helicities do not seem to contribute to the proton spin. I shall show how this result can be obtained by a direct computation in a chiral field-theoretical model of quark and gluon confinement, taking gluon exchange effects into account. At the same time, I shall get an estimate for the gluon helicity contribution.

Wednesday 30 November

OPEN MEETING

at 14.30 hrs – PS Auditorium
bldg 6, 2-024

Accelerator computing requirements in the nineties

A report 'Accelerator computing requirements in the nineties' is being prepared as the accelerator divisions' contribution to the study 'Computing at CERN in the nineties'. An interim version of the report is available on VM and can be read using 'DOCFIND CACIND ACCELERATORS ACCEL' or printed, complete with figure, on your default SGML printer using 'DOCPRI NT CACIND ACCELERATORS ACCEL'. Alternatively a copy of the report can be obtained from W. Wilkinson, PS/CO secretariat. The report will be presented at the Open Meeting by the working group R. Billinge, L. Evans, C. Hauviller, F. Perriollat, J. Poole and G. Shering. There will be time for discussion.

Wednesday 30 November

COMPUTER SEMINAR

at 16.00 hrs – Auditorium*

The ETA-10 and the future of worldclass supercomputing

by Carl LEDBETTER / Control Data and ETA Systems, USA

The use of supercomputers in scientific research is growing rapidly. Dr Carl Ledbetter, Vice President, Marketing & Sales for Control Data and ETA Systems products, will describe the technology breakthroughs achieved in the design and manufacture of the ETA-10 supercomputer series, a current system status report, and a preview of future development plans. He will also present his views on the role that supercomputers will play in worldclass scientific research projects.

Dr Carl Ledbetter joined ETA Systems in 1987 as President and CEO, after being VP, Engineering and Scientific Products at Prime Computer. Prior to joining Prime, he had been with IBM for five years in a variety of management capacities. He directed the Scientific and Engineering Processor Products laboratory of the Data Systems Division, where he headed engineering, software, marketing and planning for the 3090 Vector Facility and its follow-on products, and managed research and development for IBM supercomputer efforts. Earlier in his career, as Manager of Product Development for IBM's Academic Information Systems Business Unit, he was responsible for product development and research efforts with major US universities, including the NSF's National Supercomputer Center at Cornell. Dr Ledbetter received his MA in Mathematics from Brandeis University in 1975 and his PhD in Mathematics from Clark University in 1977.

* Coffee and tea will be served at 15.30 hrs

Thursday 1 December

TECHNICAL PRESENTATION

09.00 to 12.00 hrs – PS Auditorium
bldg 6, 2-024

Gespac seminar by Gespac SA (CH)

G-64 world standardization growing in the world

GESPAC achievement in Europe and in the USA; 'G-96+' the full G-64 upward compatible 32-bit bus; GESPAC User's Club.

Demonstration and questions

Demos on graphic software under OS-9 68000; Demos on new field bus 'FILBUS'; Demos on G-64 industrial PC-AT.

Each attendant will receive a complete set of documentation. The presentation will last 3 hours.

GESPAC new G-64 products

GESMPU-18A	The most powerful processor module on G-64 bus with the 80286 32-bit processor from Intel
GESEGA-1	Full EGA compatible graphic board on G-64 bus
GESMEM-14	Universal RAM/EPROM memory board on G-96+
GESCSI-1	Full SCSI controller
GESVIG-14B	High resolution 2048/2048 graphic controller
GESSCC-1	The only single Euroboard full X25 controller on the market today
VMENET-1	GESNET controller on VME-bus

GESPAC new systems

GES PAC 8100	A new graphic workstation on G-64 bus under OS-9 and GESCOMP-8100 O industrial PC-AT on G-64 bus
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New software products

GES SMS/DMS	Drivers under OS-9 68000 for motor controllers
GESKDS	Keyboard display driver

Languages : English (+ French)

Information : M. Diraison / FI / 4585

Thursday 1 December

PRESENTATION

10.00 to 12.00 hrs & 14.00 to 16.00 hrs
DD Auditorium, bldg 31, 3-005

Single height VMEbus products

by N. HAUSER / PEP Modular Computers (D)

Single height VMEbus provides a cheaper alternative to the more usual dual-height VMEbus in systems where board space and performance can be traded for a reduction in cost. This approach, although necessarily limited to 16 data and 24 address lines, has full upward compatibility with 32-bit VMEbus with a smaller reduction in processing or input-output performance than may be imagined. PEP, who specialize in single height VMEbus, will present their company and its product range, both hardware and software. The afternoon session will be devoted to practical demonstrations and informal discussions.

10.00 Introduction

10.10 VMEbus product range and future strategy

10.50 VMEbus CPUs (from 68000 to 68020 with 2Mbyte SRAM for ≤ 1000 SFr)

11.00 OS-9 and communication to networks and intelligent I/O

11.30 VIOXROM: the real-time multiprocessing solution for intelligent I/O modules

12.00 Lunch

14.00 Demonstrations and informal discussions (bldg 600, Conference Room 2).

Information: C. Parkman / DD / 3963
PMN@CERNVM

Jeudi 1 décembre

SEMINAIRE ST/CV

à 14.30 h – Baraque Enseignement
bât. 593

Directives européennes pour la chaudronnerie et la tuyauterie

par B. CIBORRA / Franco-Tosi/Politecnico Milano

En vue de l'échéance de 1992, des critères d'uniformité de projet s'imposent. De ce fait, un comité international (CECT) a été mis en place dont le but est l'harmonisation des normes nationales. Une comparaison technique sera présentée, avec une attention particulière au fluage à chaud et au vieillissement, ainsi qu'un aperçu sur les nouvelles technologies (MHD).

Thursday 1 December

CERN COLLOQUIUM

at 16.30 hrs – Auditorium*

Haleakala high energy gamma ray studies of Herc x-1 pulsar system

by W. F. FRY / University of Wisconsin & Michigan

The Haleakala high energy gamma ray telescope has detected signals from the binary pulsar system Herc x-1. The detected period differs significantly from the well known pulsar period. The gamma rays are interpreted as coming from bombardment of matter in Keplerian orbits near the inner edge of the accretion disk.

* Tea & coffee will be served at 16.00 hrs.

Friday 2 December

DD SEMINARS

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

Design architecture of mainframe computers

by Robert DORAN / CERN-DD

This talk discusses some aspects of the design architecture of large mainframe computers that are of general interest. An outline is given of the characteristics of processors that impinge on performance and a number of fascinating but little-known design facts concerning pipelines and caches are introduced. No knowledge of the subject is assumed.

Concurrent computing research at Caltech, Hypercubes and other projects

by Paul MESSINA / Director, California Institute of Technology

Vendredi 2 décembre*

SEMINAIRE EF

à 11.00 h – Salle de Conférence EF
bât. 13, 2-005

CAO pour le design d'ASICs utilisés dans le traitement des signaux

par Patrice SENN / CNET France

Les circuits intégrés utilisés dans le traitement de signaux et les télécommunications (ISDN) deviennent de plus en plus complexes et spécifiques, avec la possibilité de lier étroitement les jonctions digitales et analogiques. Dans ce domaine, la CAO est un outil indispensable pour la conception des ASICs. De nouveaux outils de CAO et techniques de conception de circuits intégrés CMOS, développés du Centre National d'Etudes des Télécommunications seront présentés.

* Veuillez noter le jour inhabituel!

Friday 2 December

PRESENTATION

Patrice Senn, a specialist in VLSI analog electronics at CNET, invited to CERN by the EF-DSM group, will give the EF Seminar at 11.00 hrs (see above announcement).

On the same occasion, ANACAD (Grenoble) will give a demonstration of three new CAD tools for microelectronics design:

11.00 EF Conference Room	EF Seminar Patrice SENN
15.00 DD Auditorium	Information meeting ANACAD
16.00 place to be announced at above Information meeting	Demonstration ANACAD

Information : P. Jarron / EF / 2081

Friday 2 December

SPS SEMINAR

at 14.30 hrs – SPS Auditorium

Results from the dynamical aperture experiment at the SPS

by Frank Schmidt / CERN

In 1986 and 1988 experiments were done at the SPS to find the reduction of the dynamical aperture caused by strongly excited sextupoles. The main aim of these experiments is to establish a criterion of stability for a proton accelerator with superconducting magnets like the LHC. After a short review of the 1986 experiment, the results of the 1988 experiments are presented where, for the first time, a tracking model could be tested with a real accelerator with well defined non-linearities. It is discussed in detail how a practical dynamical aperture can be found with tracking and how this stability limit depends on the density of resonance lines close to the working point in the Q_z - Q_x diagram. This dynamical aperture thus defined is then compared with that found in the experiment in a short-term and long-term time range.

Lundi 5 décembre

PRESENTATION TECHNIQUE

de 09.30 à 12.00 h & de 14.00 à 16.00 h
bât. 6, 2-002

Klaus Schaefer & Co. (CH) présente : la gamme des instruments Granville Phillips (USA) pour le vide et l'ultra-vide, les éléments pour ultra-vide de Ceramseal (USA), les débitmètres et jauges à vide de Teledyne Hastings-Raydist (USA), les pompes cryogéniques de CVI (USA), les ponts de résistance de RVE (SF), les pompes turbomoléculaires de Sargent-Welch.

Langues : allemand, anglais, français

Renseignements : M. Diraision / FI / 4585

Monday 5 December

EF SEMINAR

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

The story of the quark model told 'à la manière de' Columbo*

by Charles PEYROU / CERN-EF

The quark model in its elementary form (without the mathematics of QCD) is concrete and easy to understand. However, it was arrived at by a rather devious and abstract way called SU_3 . In this talk we will start from the elementary quark model as it stands now, deduce the SU_3 -like features which will then remain concrete and show how their experimental discoveries lead some Columbos (Gell-Mann, Dalitz, etc.) to the model. The role of the strange quark, in spite of the fact that it is not a constituent of the proton will be stressed. It will be shown how the deep inelastic scattering experiments and the discovery of the J/ψ gave to the model its final convincing proofs.

* The title will be explained especially for the non-TV fans at the beginning of the talk.

Monday 5 December

NOBEL CELEBRATION

at 15.30 hrs – Auditorium

Welcome

Talks by Melvin SCHWARTZ
Jack STEINBERGER
Leon LEDERMAN

Tuesday 6 December

MEETING ON FASTBUS DEVELOPMENTS

at 09.00 hrs – Theory Conference Room

1. *The FASTBUS data acquisition system of WA 89*
H. Dobbeling / MPI, Heidelberg
2. *ADC and TDC developments for NA 31*
G. Laverrière / CERN
3. *The ALEPH trigger system*
P. Hanke / Univ. of Heidelberg & M. Saich / Univ. of London
4. *Review of recent FASTBUS developments in the US*
H. Verweij / CERN
5. *Various*

Tuesday 6 December

TIS SEMINAR

at 14.30 hrs – PE Auditorium (Techn. Training)
bldg 593, Room 11

Finite-element analysis at CERN

by Maurizio BONA / Mechanical Engineering Group, TIS

Wednesday 7 December

CAS ACCELERATOR SEMINAR

at 14.30 hrs – LEP Auditorium
bldg 30, 7th floor

Use of quantum electrodynamics to calculate radiative effects in electron storage rings

by L. HAND / Cornell University, USA
(on leave at DESY, Hamburg)

Wednesday 7 December

LEAR DISCUSSION MEETING

at 16.00 hrs – PS Auditorium
bldg 6, 2-024

A and H products with low energy $\bar{p}$

by M. REY-CAMPAGNOLLE,
C. GUARALDO, K. KILIAN / CERN

Wednesday 7 December

EP SEMINAR

at 16.30 hrs – Auditorium

Measurement of the strong coupling constant α_s from a study of W bosons produced in association with jets

by K. JAKOBS / CERN

Thursday 8 December

PRIAM VMEbus USERS' MEETING

from 10.00 to 12.00 hrs – DD Auditorium

An informal meeting open to all those at CERN interested in the applications of VMEbus to high-energy physics.

10.00 Introduction

10.10 'VMEbus in research' – a report on the recent ESONE conference
Bob Dobinson / EP

10.40 VMEbus crates
Bruno Rigini / EP Pool

11.00 VMEbus interface chips – the realities of their availability
Brian Martin / DD

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Jeudi 1er décembre

de 13.00 h à 13.30 h – Auditorium

Science pour tous

par R. CARRERAS

11.20 'VXIbus' – a solution to VMEbus in front-end applications ?

Chris Parkman / DD

11.45 Software presentation – the latest situation

Chris Eck / DD, PRIAM Project Leader

Information : C. Parkman / DD / 3963

PMN@CERNVM

Friday 9 December

44th PLENARY ECFA MEETING

at 09.00 hrs – Council Chamber

1. Approval of the Draft Minutes of the 43rd Plenary ECFA Meeting
2. Approval of the Draft Agenda
3. Chairman's Report
4. Review of the US Programme
F.E. Low, Chairman HEPAP
5. Status of the HERA Project
V. Soergel
6. Status Report SppS Programme
L. di Lella
7. LEP Progress Report
E. Picasso
8. Research Development for TeV Linear Collider
W. Schnell
9. ECFA Study Week on Instrumentation for High-luminosity Collider
G. Jarlskog
10. ECFA Survey of Activity and Resources in HEP in Europe
R. Turnbull
11. Any Other Business

Mardi 6 décembre

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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