

FERMETURE DE FIN D'ANNEE 1992/1993
Information anticipée

Le Laboratoire sera fermé du mercredi 23 décembre 1992 au lundi 4 janvier 1993 inclus. Le premier jour de travail sera mardi 5 janvier 1993.

Division du Personnel
Tél. 3238-4474

END-OF-YEAR CLOSURE 1992/1993
Advance notification

The Laboratory will be closed from Wednesday 23 December 1992 to Monday 4 January 1993, inclusive. The first working day will be Tuesday 5 January 1993.

Personnel Division
Tel. 3238-4474

SEMINARS

SEMINAIRES

Monday 27 January

COMPUTING SEMINAR

at 14.30 hrs* – CN Auditorium
bldg 31/3-005

Recent advances in signal processing algorithms and hardware

by Yrjo NEUVO / Signal Processing Laboratory,
Tampere University of Technology, Finland

The emphasis of this talk is on the use of nonlinear, median related operations in signal and image processing. It is shown that these operations have quite attractive properties for many applications and satisfy optimality criteria in a very similar manner as linear filters do. Several extensions of the median concept are introduced like vector median for multivariable data (color images and image sequences) and matched median for signal detection. The other part of the talk describes certain low level image processing architectures based on reconfigurable cellular arrays and statistic dataflow graphs. Several operations of such a graph can be mapped over a reconfigurable array, together with the interconnections, as if it were an ASIC gate array. Almost gate level optimization and minimum communication distances between the nodes of the graph ensure fast processing.

Information: Nikolay Tchamov / ECP /
tchamovn@slcjp01.cern.ch

* Please note unusual day & time

Monday 27 January

PPE SEMINAR

at 16.30 hrs – Auditorium

Highlights of the 2nd KEK Topical Conference on e^+e^- Collision physics

by Jose SALICIO

In this seminar I shall summarize the highlights of the presentations made at the Conference. The first half of the Conference was devoted to currently operating e^+e^- colliders. Here I will report on results from BES (BEPC), ARGUS (DORIS) and CLEO II (CESR) and the status of the detectors operating at TRISTAN, namely, AMY, TOPAZ and VENUS. The second half of the conference was devoted to future e^+e^-

colliders. The phi, tau/charm and B factory projects. In the last part of the seminar, the plans for the future linear colliders will be discussed.

Tuesday 28 January

PRESENTATION

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

Research and Service at TIMA – CMP in Microelectronics

by B. COURTOIS / Director of TIMA-CMP

The talk will be on Research and Service activities ongoing at TIMA and CMP in Grenoble. The group consists of approximately 40 people. Research activities include the architecture of integrated circuits, silicon compilation, architecture of AI oriented machines, testing and design of self-checking circuits, and electron-beam testing. New research topics include the design of radiation-hardened circuits and the extension of boundary scan to include facilities for both on-line and off-line testing of both printed and integrated circuits. Service is concerned with integrated circuit manufacturing brokerage. Presently, the Service is offering CMOS DLM (1.5u, 1.2u), CMOS DLP-DLM (2u, 1.2u in 1992), and Bipolar 'Polyuse 12'. In 1992, the Service should offer Multi-Chip Modules and GaAs.

Information : Mike Letheren / ECP / 8062

Wednesday 29 January

PRESENTATION

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

LINKWORKS : Hypermedia from DIGITAL

by Andre PAVANELLO / Digital

LinkWorks, Digital's hypermedia solution is part of DECwindows/Motif and focuses mainly on the following two aspects of information management:

- Information linking – creating explicit links between information objects

- Information navigation – using links between information objects to navigate the information space.

The open LinkWorks architecture sets the LinkWorks environment apart from the conventional hypertext systems, which have traditionally been implemented as a single tool, supporting a small number of document types. With LinkWorks, a wide variety of DECwindows applications, merge using the LinkWorks Services to form a comprehensive interlinked environment.

A demonstration of LinkWorks will be performed at the end of the presentation.

Andre Pavanello, a senior software engineer at Digital, has been a member of the LinkWorks project for the past 5 years, and has played a key role in designing and implementing the LinkWorks services, utilities, and user interface.

Information : Tor Bothner / DEC / 7095

Mercredi 29 janvier

PRESENTATION TECHNIQUE

10.00-12.00 h & 14.00-1600 h – bât. 17/1-007

Linde Gaz Industriels Sarl (F), produisant et distribuant tous gaz industriels et scientifiques, présente sa gamme de matériel mano-détendeurs, centrales à inversion et accessoires pour la mise en œuvre des gaz de haute et très haute pureté, gaz corrosifs, mélanges techniques et mélanges étalons.

Spécifications : acier inoxydable ou laiton chromé, simple ou double étage, moyenne et basse pression, faible et grand débit, réglage précis voire très précis de la pression d'utilisation. Possibilité de soupape de sécurité collectable. Etanchéité empêchant toute contamination atmosphérique par diffusion du gaz. Equipement hautement convertible par adjonction de débitmètres, vannes de réglage et autres accessoires.

Utilisation : laboratoires de contrôle et d'analyse, ateliers de production, gaz porteur en chromatographie, spectrométrie de masse, fabrication des semi-conducteurs, installation process pour l'électronique, etc.

Langues : anglais, français

Renseignements : M. Diraison / FI / 4585

Wednesday 29 January

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Impact of gauge invariance on triple vector boson couplings : LEP1 versus LEP2

by Belen GAVELA / CERN

LEP1 has tested the $SU(2) \times U(1)$ gauge invariance of the standard model up to the level of quantum corrections. 'Meta-theories' beyond the standard model must respect this symmetry and are represented, in a model-independent way, by inserting into the standard Lagrangian a complete set of new operators. On the light of present experimental constraints, this analysis severely limits the room for non-standard effects in future observables, such as the $e^+e^- \rightarrow W^+W^-$ process. In particular, the direct measurement of triple-gauge-boson vertices at LEP2 is most unlikely to provide new information.

Wednesday 29 January

COMPUTING SEMINAR

at 16.00 hrs – CN Auditorium
bldg 31/3-005

Fortran 90 : an Introduction

by Michael METCALF / CERN/CN-AS

Fortran 90 was finally published as an International Standard last August, and a first compiler, from NAG, has been under test at CERN for some time. In this seminar, the principal advantages of Fortran 90 will be reviewed and experience with the f90 compiler, now available on most Unix platforms at CERN, will be summarised.

It will serve as an introduction to a detailed course to be held later this Spring.

Thursday 30 January

DETECTOR R&D COMMITTEE

Open session

at 14.00 h – Council Chamber

1. RD-2 Status Report: 'Study of a tracking/preshower detector for the LHC' (Bern–Cambridge–CERN–Dortmund–Geneva–Hamburg–Melbourne–Olso–Oxford–Univ. & INFN Perugia–RAL–Saclay CEN DPhPe–Sydney; DRDC 92-4; A.G. Clark).
2. RD-4 Status Report: 'Study of liquid argon dopants for LHC hadron calorimetry' (CERN–Mann Siegbahn Inst. of Phys. Stockholm; DRDC 91-56; V. Vuillemin).
3. RD-5 Status Report: 'Study of muon triggers and momentum reconstruction in a strong magnetic field for a muon detector at LHC' (Aachen TH, III Phys. Inst.–Budapest Res. Inst. of Physics–CERN–SEFT Helsinki–Madrid CIEMAT–NIKHEF–H/Nijmegen–Univ. & INFN Padua–Univ. & INFN Rome–UCLA–UC Riverside–Vienna HEPHY–Warsaw; DRDC 91-53; A. Di Ciaccio).
4. RD-7 Status Report: 'Central tracking with scintillating fibres' (CERN–KfK Karlsruhe–Kuraray Co., Tokyo–CRNS, Toulouse–IHEP, Zeuthen–World Lab., Lausanne; DRDC 91-55; C. D' Ambrosio).
5. RD-18 Status Report: 'A study of new fast and radiation hard scintillators for calorimetry at LHC' (Aachen–LAPP–TIFR Bombay–CERN–LNPI Leningrad–Lund–LPCML & IPNL Lyon–Milan–INFN Rome; DRDC 92-2; P. Lecoq).
6. RD-19 Status Report: 'Development of hybrid and monolithic silicon micropattern detectors' (CERN–Univ. & INFN Bari–Univ. & INFN Bologna–Univ. & INFN Genoa–Ecole Poly. Fed. Lausanne–Smart Si Systems, Lausanne–Interunivers Micro Electr. Centre, Leuven–CPPM Marseille–Univ. & INFN Milan–Collège de France–Univ. & INFN Pisa–ETH Zurich; DRDC 92-5; E.H.M. Heijne).
7. Proposal: A silicon hadron calorimeter module operated in a strong magnetic field with VLSI read out for LHC (CERN–JINR, Dubna–Univ. & INFN, Firenze–Univ. & INFN, Milano–Oak Ridge National Lab.–Univ. & INFN, Roma–Tennessee–HEPHY, Vienna; DRDC 91-54/P34; B. Borgia).

Closed session

Friday 31 January starting at 9.00 h in the 6th floor
Conference Room, Admin. Building.

Friday 31 January

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

Inclusive semileptonic decays of heavy hadrons

by Josep TARON / Centre de Physique Théorique,
Marseille

Spectator model decay rates are predicted for inclusive semileptonic B decays, for both charmed and uncharmed final states, in the limit when the b and c quarks are infinitely heavy, in lowest order of perturbative QCD.

Tuesday 4 February

CERN COLLOQUIUM

at 14.30 hrs – Auditorium

Soft matter

by Pierre-Gilles DE GENNES / Nobel Laureate for
Physics 1991, Collège de France, Paris

* Please note unusual time

** Tea and coffee will be served after the talk at 16.00
hrs

Mercredi 5 février

PRESENTATION TECHNIQUE

09.30-11.30 h – Salle de Conférence ECP
bât. 13/2-005

Erni + Co. AG (CH), présente 'la connectique sans soudure / Press-fit' selon norme DIN 41 612.

Durée 2 heures, concerne toutes les personnes ayant
un intérêt pour le développement ou le montage des
circuits imprimés.

Langues : allemand, anglais, français, italien selon
demande.

Renseignements: M.Diraison / FI / 4585

Wednesday 5 February

PRESENTATION

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

Microprocessor User Meeting

1. OS-9 in the CHORUS experiment (Beverley Friend)
2. Microware's BOOTP - booting across a network (Martin Saich)
3. Lynx-OS : Physics Status (Jorgen Petersen)
4. Lynx-OS : Administrative Status (Julian Blake)
5. New OS-9 Products (Douglas Kemp)

Bulletin CERN
5/92 – 27.01.92

FOR/POUR INFORMATION

LAPP

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F – 74941 Annecy-le-Vieux
Tél. 50 23 32 45

Vendredi 31 janvier

SEMINAIRE LAPP

à 10.45 h – Amphithéâtre LAPP

Expériences avec les neutrons froids à l'ILL Grenoble

par P. LIAUD / LAPP & Université de Savoie

- Durée de vie du neutron.
- Asymétrie de l'émission des électrons dans la désintégration du neutron polarisé
- Proposition d'un test de l'invariance dans le renversement du temps dans la désintégration du neutron polarisé

Information : Sylvie LEES-ROSIER, LAPP / ext. 328 /
SROSIER@FRCPN11

TRAINING AND EDUCATION ENSEIGNEMENT

ACADEMIC TRAINING

Tel. 2844

27, 28 & 29 January

11.00-12.00 hrs – Auditorium

Fibre optics and new developments in photonics

by E. ROSSA / CERN-SL

*L'exposé aura lieu en français / The presentation will be
made in French*

ENSEIGNEMENT GENERAL

Tél. 5811

Jeudi 30 janvier

à 13.00 h – Amphithéâtre

Science pour tous

par Rafel CARRERAS