

COMMUNICATIONS OFFICIELLES

OFFICIAL NEWS

Les membres du personnel sont censés avoir pris connaissance des communications officielles ci-après.

La reproduction même partielle de ces informations par des personnes ou des institutions externes à l'Organisation exige l'approbation préalable de la Direction du CERN.

RAPPEL

RENOUVELLEMENT DES DOCUMENTS DE LEGITIMATION

Les membres du personnel et leur famille détenteurs de

CARTES SUISSES

dont la validité expire au plus tard le 31 décembre 1992, sont priés de les adresser pour prolongation à l'un des services suivants de la Division du Personnel:

- Bureau des Dossiers pour les titulaires
- Service des Boursiers et Attachés.

Pour chaque carte dont la prolongation ne serait plus possible faute de place, il conviendra de joindre 3 photos récentes de format passeport qui serviront à l'établissement d'une nouvelle carte.

Ce qui précède s'applique également aux

CARTES FRANCAISES

à l'exception du nombre de photos (2 au lieu de 3).

Compte tenu du nombre de cartes à renouveler, il ne pourra être établi d'attestation dans l'attente du retour des cartes. Vous êtes donc invité(e) à en conserver une photocopie.

Si vous êtes en possession de cartes périmées, l'Organisation ne prend aucune responsabilité en cas de difficulté avec les autorités de Douane ou de Police.

Division du Personnel
Tél. 3238 ou 4682 – Titulaires
Tél. 4471 ou 4449 – Boursiers et Attachés

Members of the personnel shall be deemed to have taken note of the news under this heading.

Reproduction of all or part of this information by persons or institutions external to the Organization requires the prior approval of the CERN management.

REMINDER

EXTENSION OF LEGITIMATION DOCUMENTS

Members of the Personnel and their families holders of

SWISS CARDS

due to expire on or before 31 December 1992 should send them for extension to one of the following services of Personnel Division:

- Staff Records for staff members
- Fellows and Associates Service.

Please note that if any card has no space for further validation, it should be returned with 3 recent passport photographs so that a new one may be prepared.

The above applies also to

FRENCH CARDS

except for the number of photographs (2 instead of 3).

In view of the considerable number of cards to be renewed, it will not be possible to issue attestations to replace them; please keep photocopies.

If you are in possession of invalid cards, the Organization will not take any responsibility in case of difficulties with the Police or the Customs authorities.

Personnel Division
Tel. 3238 or 4682 – Staff Members
Tel. 4471 or 4449 – Fellows and Associates

SEMINARS SEMINAIRES

Lundi 16 novembre

PRESENTATION TECHNIQUE

bât. 24/1-016

SAG Schweisstechnik AG (CH) / Messer-Griesheim (D) propose deux conférences:

10.00 – 11.30 *Purification des gaz et applications*
par M. SCHNEIDER / MG Duisbourg

14.00 – 15.30 *Manodétendeurs – Types et stations automatiques et applications*
par M. HEEGS / MG Frankfurt

Langues : anglais, questions en allemand et français
Renseignements : M. Diraison / FI / 4585

Monday 16 November

DETECTOR SEMINAR

at 11.00 hrs – ECP Conference Room
bldg 13/2-005

Development of a high resolution tracking detector based on capillaries filled with liquid scintillator

by G. MARTELOTTI / INFN, Rome &
S. GOLOVKIN / IHEP, Protvino, Russia

A general description of the technique will be given. Systematic studies of the detector performances and recent results obtained with a prototype will be reported and developments of new read-out chains presented, e.g. electron-bombarded CCD; optoelectronic delay tube.

Monday 16 November

AC SEMINAR

at 11.00 hrs – AT Auditorium
bldg 30, 7th floor

Recent advances in Detector development

by F. BONAUDI / CERN-ECP

Important programmes of research and development in particle detectors are under way. The main European efforts in this field are centered around the Detector R&D Committee (DRDC) of CERN, which was set up in 1990. More than 40 proposals have been received, and about 30 of these form part of the approved programme. The principal lines of development will be illustrated, under the broad headings of tracking, calorimetry, particle identification and data acquisition. This seminar will be of interest mainly to people non specialised in detectors.

Monday 16 November

PRESENTATION

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

HP Announcement of new 700 Series Models

Hewlett-Packard announces new Series 700 Models based on the PA-7100 Technology. HP will present its new line of workstations and servers based on the powerful PA-7100 technology. HP also offer upgrade paths for all its present customers who want to upgrade their installed systems to the PA-7100 Technology. In parallel to these systems, the version 9.0 of HP-UX will be introduced. HP-UX 9.0 offers new features and benefits to workstations users in the areas of performance, ease of use and standards compliance. In addition, Hewlett-Packard will announce the availability of scalable, parallel systems based on HP's PA-RISC processors and Convex's supercomputing technologies.

Monday 16 November

PPE SEMINAR

at 16.30 hrs – Auditorium

Automatic Feynman Diagram Computations

by Jos VERMASEREN / NIKHEF, Amsterdam

Many computations in field theory are straightforward and involve mainly a large amount of labour. They are prime candidates for automatization. They include the computations of tree level cross-sections and one loop radiative corrections. Backgrounds often involve tree level computations that may be orders of magnitude more work than the evaluation of the signals. Usually theorists are not interested in doing these computations while experimentalists do not have the expertise. The talk will show what is needed for automatic evaluation and then discuss the ESP (Experiment Simulation Program) project. Some partial results will be shown.

Tuesday 17 November

PRESENTATION

at 10.30 hrs – CN Auditorium
bldg 31/3-005

Presenting ITASCA, the Oriented Data Base

by Eric BAERENZUNG & Amir NAJMI / IBEX
Computing, F-74160 Archamps

The past few years have seen tremendous growth in Object Oriented Data Base technology, with the result that many commercial products are now available. This presentation briefly traces the development of this technology up to the current state of the art. It also presents ITASCA as an example of a state-of-the-art Object Oriented Data Base, discussing in detail its features and development tools. The presentation is followed by a demonstration of the product.

Company contact: Amir Najmi / (023) 50315700

Tuesday 17 November

PRESENTATION

at 15.00 hrs – CN Auditorium
bldg 31/3-005

IXI's X.Desktop

X.Desktop is a graphical user interface, based on MOTIF, which offers an icon-based interface to UNIX workstations. There will be a presentation of the product by a representative of IXI plus a demonstration of a CERN implementation prepared by Manuel Guijarro /CN X.Desktop runs on SUN, ULTRIX, HP Series 700 and RS/6000 workstations. Owners of SUN and ULTRIX workstations should note that we have negotiated a special price for this package for CERN, including updates to the newly-released version 3.5. This presentation will be followed by a SUN Users Meeting.

Information: A.Silverman, M.Guijarro /CN

Tuesday 17 November

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

Direct γ production from experiment UA6 : $\Lambda_{\overline{MS}}$ and the gluon structure function

by P.T. COX / The Rockefeller University, New York

Using a hydrogen gas-jet target in the SPS Collider, Experiment UA6 has measured direct photon cross-sections

in $\bar{p}p$ and pp production at $\sqrt{s} = 24.3$ GeV. A value for the strong interaction coupling constant can be extracted from the difference of the cross-sections, and the shape of the gluon structure function of the proton can be obtained.

*Tea & coffee will be served at 16.00 hrs

Wednesday 18 November

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Galaxy clustering: why Peebles and Zel'dovich were both right

by Adrian MELOTT / University of Kansas, Lawrence, USA

In the late 1960's and early 1970's, two theories of the formation of galaxies and large-scale structure emerged. They were the bottom-up hierarchical clustering picture and the top-down or "pancake" model, associated with Western and Soviet astrophysics respectively. Our present understanding of the clustering process and of the clustering extant in our Universe indicates that these are not mutually exclusive, and what happens deep in the non-linear regime is described by both pictures.

Wednesday 18 November

CERN COMPUTING COLLOQUIUM

at 16.30 hrs – Auditorium*

Global scientific computing via a flock of Condors

by Miron LIVNY / Computer Sciences Department, University of Wisconsin-Madison

In recent years we have experienced a dramatic increase in the processing capacity owned by the scientific community, much of it in the form of powerful workstations on the desks of experimental scientists and farms of Unix boxes assigned to small groups of researchers. Due to fluctuations in the processing demands of the owners of these resources, most of them are underutilized while at the same time many researchers experience very long waiting times for their scientific computations. This is the "wait-while-idle" problem. Since 1984 we have been developing the Condor system designed to solve this problem by routing scientific computations to unutilized computing resources in a cluster of privately owned Unix workstations in such a way that the owner of the workstation sees no degradation in its availability. The Condor system in our department currently controls a cluster of more than 250 workstations and is used by more than 30 researchers. Condors have been installed also in a wide range of other scientific environments. Current research includes the study of how to use a flock of Condor systems to solve the wait-while-idle problem from the perspective of very large (even world-wide) clusters of heterogeneous computing resources.

Organizer: F. James/CN

*Tea & coffee will be served at 16.00 hrs

Vendredi 20 novembre 1992

PREMIÈRE JOURNÉE FRANCO-SUISSE DU GÉNIE PARASISMIQUE

à 09.00 h – Amphithéâtre

Renforcement du bâti existant

par l'EPFL de Lausanne

Les membres du CERN intéressés par le sujet pourront assister gratuitement aux exposés présentés au cours de la journée.

Responsable du Comité d'organisation :

M. Koller, 21 rue Jacques Grosselin, 1227 Carouge, tél. 301.02.53

Friday 20 November

PRESENTATION

at 10.00 hrs – AT Auditorium m
bldg 30, 7th floor

Mathematica at CERN

by R. MAEDER (author of Mathematica's Programming Language)

10.00 General Approach (M.V. Almsick/Wolfram)

Introduction to Mathematica ?

Math World

Mathematica materials and resources

Books, magazines, MathSource, Email

Technical support (on line help)

11.00 Mathematica Problem Solving Clinic: Q & A

12.00 Lunch break

14.00 Interfacing Mathematica with external programs
(R.Maeder/Wolfram)

Practical applications (B.Autin/CERN)

Mathematica and AVS in beam visualisation

15.00 Mathematica Problem Solving Clinic: Q & A

Friday 20 November

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

Chiral perturbation theory for baryons containing light quarks

by Elizabeth JENKINS / CERN

The 1/m expansion for the baryon chiral Lagrangian is discussed. One-loop chiral corrections to the baryon octet axial vector currents, octet and decuplet baryon masses, and hyperon non-leptonic decays are presented.

Friday 20 November

CAS ACCELERATOR SEMINAR

at 14.30 hrs – Auditorium*

The Eighth Lecture in the John Adams' Memorial Lecture Series

The status of the ESRF

by J.L. LACLARE / ESRF

The ESRF (European Synchrotron Radiation Facility) is a fundamental research institute based in Grenoble. Construction of the ESRF source started in 1988 as a joint project of 12 European countries (France, Germany, Italy, United Kingdom, Spain, Denmark, Finland, Norway, Sweden, Belgium, Netherlands, Switzerland). The facility consists of a 200 MeV electron linear accelerator, a 6 GeV fast cycling booster synchrotron and a 6 GeV low emittance storage ring optimized to produce high brilliance X-rays from insertion devices. The project is now well advanced. The electron linac delivered its first beam in May 1991 and reached design performance in the 1 μ s pulse operation during the one month commissioning period. Commissioning of the booster started in September 1991 with the operational energy of 6 GeV being reached in November 1991. Storage Ring commissioning began in February 1992, and progress has been extremely fast and promising, since less than 4 months later the target intensity of 100 mA in the multibunch mode was reached for the first time. In July the first undulator was operated without any effect on the beam and the machine diagnostics beamline was run at the full nominal current with a record brilliance in the 10^{17} range. The commissioning of some Phase I beamlines has just started and first external users are expected for the beginning of 1994.

*Tea and coffee will be served after the lecture (~16.00h)

Tuesday 24 Novembre

PRESENTATION

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

Phigure

by J.-B. CAZEAUX / G5G (Graphisme 5e Génération), Mérignac, France

Information : C.Vandoni / CN

Tuesday 24 November

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

Early physics from ZEUS at the high energy e-p collider HERA

by John MARTIN / University of Toronto

Wednesday 25 November

PRESENTATION

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

ORACLE7, a Technical Overview

by John RADCLIFFE / Oracle UK

Information: S. Santiago / CN

Wednesday 25 November

PS SEMINAR

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

Plasma lenses for particle accelerators

by R. KOWALEWICZ / University of Erlangen-Nürnberg

Thursday 26 November

TECHNICAL PRESENTATION

09.00 – 12.00 hrs – bldg 54/2-035

Microcomputers Systems Components, MSC Vertriebs GmbH (D), representing Hybrid Memory Products Ltd (GB)

Information: M. Diraison / FI / 4585

Thursday 26 November

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium

Study of high mass photon pairs in $\ell^+\ell^-\gamma\gamma$ events

by Samuel C.C. TING / MIT-CERN

POUR INFORMATION

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Département de Physique Nucléaire et
Corpusculaire

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24, quai Ernest-Ansermet
1211 Genève 4
Tél. 7026273 ou 7026369

Monday 16 November

SÉMINAIRE DE PHYSIQUE CORPUSCULAIRE

at 16.15 hrs – Auditoire Stueckelberg

Les transputers en physique des hautes énergies

par H.L. PAGÈS / CERN

Les besoins en puissance de calculs, nécessaires pour satisfaire les contraintes de trigger et d'analyse des expériences imposées par les futurs accélérateurs (LHC, high luminosity factories), sont sans cesse croissants. Ils ne pourront être couverts qu'en faisant appel aux divers types de parallélisme. Ceux-ci trouvent un champ d'application idéal dans les expériences en physique des hautes énergies. Le Transputer, processeur dédié au parallélisme de par ses facilités de communication inter-processeurs, apparaît comme un candidat possible pour les triggers de deuxième niveau. De plus, il répond au rôle d'unité intelligente de transfert de données et de contrôle d'expérience. Une description de la nouvelle génération de Transputers (T9000) accompagnera la présentation des divers développements menés au CERN dans le cadre de projets ESPRIT (GP-MIMD). La mise au point de systèmes de trigger et d'acquisition "scalable" (S-DAS), évolution du système de recherche de traces conçu à l'IPN-Lausanne pour l'expérience UA6 du CERN, sera présenté.