

dant au Directeur général d'autoriser la soumission d'un amendement aux Statuts de la Caisse d'assurances successivement au CCEC, au Comité des Finances et au Conseil. Cet amendement aux Statuts de la Caisse d'Assurances est nécessaire en vue de l'application de la Circulaire administrative n° 20-1. Un projet de texte documentant l'amendement proposé a également été approuvé.

Groupe de travail sur les pensions du CERN :

M. R.F. Heyn a présenté un rapport sur la première réunion du Groupe de travail tripartite, tenue le 13 mars 1984, lors de laquelle a été présenté un document exposant les propositions relatives à la mise en place du quatrième échelon du régime des compléments de pensions. Le Groupe a demandé à quelques-uns de ses experts d'examiner les données et de faire rapport à la réunion plénière de mai 1984.

Prochaine réunion :

La prochaine réunion ordinaire du Comité aura lieu le 18 avril 1984.

VOLS

Le 13 mars 1984, une caisse à outils a été volée au SPS. Le CERN a demandé l'intervention de la Gendarmerie française et a porté plainte. Le lendemain, les voleurs ont été identifiés. Il s'agit de deux salariés d'une entreprise liée au CERN par un contrat. Ils ont avoué être les auteurs de ce vol, et d'autres, commis au CERN. Une perquisition à leurs domiciles a permis à la police de récupérer de l'outillage et du matériel de bureau volés au cours de ces deux derniers mois.

A cette occasion, il est vivement demandé au personnel de déclarer immédiatement et par écrit toute disparition ou détérioration de matériel appartenant à l'Organisation. Ceci faciliterait l'enquête par les autorités compétentes et contribuerait à l'identification des auteurs de ces actes.

Groupe Réception
Tél. 5152

for the implementation of Administrative Circular No. 20-1. A draft document explaining the background for the proposed amendment was also approved.

Working Group on CERN Pensions :

Dr. R.F. Heyn reported on the first meeting of the Tripartite Working Group which took place on 13 March 1984, when a document was presented outlining the proposals for the introduction of a fourth step of complementary pensions. The Group asked some of its experts to examine the data and report to a plenary meeting in May 1984.

Next meeting :

The next regular meeting of the Committee will take place on 18 April 1984.

THEFTS

On 13 March last, a tool-box was stolen from the SPS. CERN called in the French police and reported the incident. On the following day, the thieves were identified. They are employees of a contractor at CERN. They admitted responsibility for this theft and for others committed at CERN. During searches of their homes, the police recovered tools and office equipment stolen during the last two months.

In this connection, personnel are strongly urged to declare immediately and in writing the disappearance of equipment belonging to the Organization or any damage to such equipment. This should help in police inquiries and contribute to the identification of those responsible for such acts.

Reception Group
Tel. 5152

SEMINARS SEMINAIRES

Monday 2 April

EF SEMINAR

at 11.00 hrs – EF Conf. Room (bldg. 13, 2-005)

**A large area spark counter with fine time
and position resolution**

by A. OGAWA / SLAC

Spark Counters are detectors in which the passage of a charged particle through a gas region between two planar electrodes at high voltage leads to a spark. Electrical signals induced by the spark are carried to readout electronics via integral transmission lines running the length of the counter. Such counters are capable of good position resolution and superior time resolution. The speaker will discuss the construction and performance of the largest area spark counter to date.

Monday 2 April

EP SEMINAR

at 17.00 hrs – Auditorium

Results from ARGUS at DORIS II

by P. BÖCKMANN / CERN-EP

Gluonic and radiative decays of the upsilon prime meson have been studied. The branching ratio for the decay $\text{upsilon prime} \rightarrow \pi^+\pi^-$ is measured to be $(17.9 \pm 0.9 \pm 2.1)\%$. The high statistics decay distributions for this process are consistent with a 2-gluon decay mechanism. The electromagnetic transition $\text{upsilon prime} \rightarrow \gamma \ ^3P_J$ is investigated by means of converted photons. We find three lines at photon energies of 111.4 ± 2.0 , 129.5 ± 0.6 and 148.5 ± 2.1 MeV with an energy resolution of 1%. The observation of a charged

object, possibly the strange-charmed F -meson at $(1970 \pm 5 \pm 8) \text{ MeV}$ is presented in the decay channels $F \rightarrow \phi\pi$ and $F \rightarrow \phi 3\pi$. The D^0 -meson is observed in the decay $D^* \rightarrow \pi D^0$, where $D^0 \rightarrow K\pi$ and $D^0 \rightarrow K 3\pi$. The fragmentation function shows the expected behaviour. The production of B mesons at the $\psi(4s)$ has been investigated.

Tuesday 3 April

DD SEMINAR

at 10.30 hrs – DD Amphitheatre
(bldg. 31, 3rd fl.)

VM at SLAC

by T. JOHNSTON / SLAC, Stanford, USA

An overview of the SLAC Central Computing Facility. The equipment, organization, direction and the use of the VM will be discussed, with particular emphasis on the use of VM for physics computing.

Tuesday 3 April

PRESENTATION

at 14.00 hrs – Council Chamber

The IBM personal computer

by Walter PLETSCHER / IBM, Zurich

The line of Personal Computer products from IBM will be presented. The IBM PC, PC XT and PC XT/370 will be described together with the newly announced IBM PC/3270. The presentation will also cover IBM PC products presently available only in the USA.

Mercredi 4 avril

PRESENTATION TECHNIQUE

de 10.00 h à 16.00 h – bât. 17, salle 1-007

CORECI, Compagnie de Régulation et de contrôle Industriel (F), propose en exposition sa gamme d'instrumentation de mesure, de régulation, de surveillance, de programmation et d'enregistrement des grandeurs physiques : température, humidité relative, pression, débit, etc.

Langue : français

Renseignements : M. Diraison / FI / 4585

Wednesday 4 April

THEORETICAL SEMINAR

at 14.00 hrs – TH Conf. Room

Progress with superstring theories

by Michael B. GREEN / Queen Mary College, University of London

These theories generalize conventional supersymmetric field theories, based on point-like quanta (such as $N=8$ supergravity), to theories in which the quanta are string-like. Such theories (which reduce to ordinary field theories at low energies) may be well-defined quantum theories

of gravity. The talk will be a non-technical review of recent developments concerning :

- (a) *the formulation of superstring quantum mechanics based on a generalization of the action of Nambu and Goto,*
- (b) *the local interactions between string fields and the systematics of string perturbation theory.*

Wednesday 4 April

CAS ACCELERATOR SEMINAR

at 14.30 hrs – LEP Auditorium
(top floor of bldg. 30)

The LEP synchrotron radiation vacuum experiment at Orsay

by A.G. MATHEWSON / CERN

Results are presented of synchrotron radiation induced neutral gas desorption from a 3 metre section of LEP vacuum chamber exposed to the photon beam emerging from the electron storage ring DCI in Orsay. Photoelectron currents in the test chamber have also been measured, and in comparison with calculations, have shed some light on the mechanism for the gas desorption process.

Wednesday 4 April

CERN COMPUTER SEMINAR

at 16.00 hrs – Auditorium*

Distributed systems research at Lawrence Berkeley Lab.

by Joe SVENTEK / Lawrence Berkeley Laboratory, USA

Scientific work stations are currently being developed at a number of research laboratories. The effort at LBL has concentrated on research into the networking aspects necessary to make such work stations cost effective. Results in two areas will be presented : network performance and distributed graphics. High data-rate applications for scientific work stations require good understanding of the underlying network hardware. Although simulation studies give rough ideas as to the expected performance, it is necessary to measure actual network hardware to confirm these predictions. The performance measurements of two 10 Mbit/s network products (a token ring and an Ethernet) will be presented. The initial results indicate that the hardware performs quite differently from the predictions, especially under heavy load. A scientific work station should permit a scientist to access interactively the varied computational resources available. As a test of the viability of this assumption, extensive studies have been performed on the design and implementation of a distributed graphics capability across the internetwork of machines at LBL. The results of such studies will be presented.

The speaker will be at CERN from 2 April to 10 April, teaching a course on 'The UNIX programming environment'. He can be reached through P. Palazzi, phone 3944.

* Tea and coffee will be provided at 15.30 hrs.

Thursday 5 April

ISOLDE SEMINAR

at 10.30 hrs – TH Conf. Room

A new kind of natural radioactivity

by H.J. ROSE / University of Oxford

From a systematic study of the properties of nuclei heavier than lead, we have concluded that, in one or two cases, radioactive decay by emission of a particle heavier than the α -particle might be observable in competition with the latter. We have observed such decay in ^{223}Ra which occurs in the natural radioactive series emanating from ^{235}U . Two 'by-pass' modes seem likely: emission of ^{14}C , to ^{209}Pb , with a Q -value of 32 MeV; and of ^{12}C , to ^{211}Pb , with a Q -value of 28 MeV. (Emissions of ^{13}C and ^{15}C from the same nucleus have a priori emission rates similar to that of ^{12}C , but the emission of α -like nuclei seems more likely.) In this study we have used a solid-state computer interfaced counter telescope to identify the charge of the particle emitted, and, for greater convenience, a source of ^{227}Ac (half life 21 yr), with which the lower members of the series, including ^{223}Ra , are in secular equilibrium. We have observed particles identifiable as carbon ions and, from their energy and emission rate, they are ^{14}C rather than other carbon isotopes. The branching ratio for emission of ^{14}C nuclei relative to α -particles from ^{223}Ra is $8.5 \pm 2.5 \times 10^{-10}$, corresponding to a reduced width (preformation probability) smaller by a factor of $\sim 10^5$ to 10^6 .

Jeudi 5 avril

PRESENTATION TECHNIQUE

de 14.00 h à 16.30 h – Amphithéâtre LEP (bât. 30, dernier étage)

GERTY S.a.r.l. Technologies Associées et TESTECH S.a.r.l. (F) proposent une conférence sur le thème 'Utilité et procédures d'application du test automatique dans la vérification des circuits imprimés équipés'. Résumé: comparaison du test fonctionnel et 'in-situ', principales fonctions pour cartes logiques, principales fonctions pour cartes analogiques, testeurs fonctionnels Membrain et Gen Rad, caractéristiques du test 'in-situ', applications sur testeurs, détermination des seuils de rentabilité du test et approche des coûts, test et réparation de cartes à partir des systèmes, données nécessaires et approche pratique des opérations.

Langues: anglais, français selon auditoire
Renseignements: M. Diraison / FI / 4585

Friday 6 April

PRESENTATION

at 11.00 hrs – DD Amphitheatre
(bldg. 31, 3rd fl.)

The ICL PERQ-Personal workstation

by Peter LEVER / PERQ marketing
Roger VINNICOMBE / International Computers Limited

The presentation will describe the architecture of the ICL PERQ2 hardware and PNX 2.0 software as provided to CERN. Reference will be made to the communications and networking facilities available. There will also be a review of some of the applications software now available, not only from ICL but also from specialised independent software houses.

Monday 9 April

EP SEMINAR

at 17.00 hrs – Auditorium

Studies of high p_T and E_T^0 phenomena in $p\bar{p}$ and pp interactions at the ISR

by Ch. VON GAGERN / Rockefeller University

A comparison between $p\bar{p}$ and pp interactions at $\sqrt{s} = 53$ GeV will be presented. The ISR experiment R110 has almost full azimuth coverage for electromagnetic energy deposition in the rapidity range $|y| \leq 1$. High $p_T \pi^0$ spectra and neutral transverse energy (E_T^0) spectra up to 20 GeV will be shown. The event structure for high E_T^0 events will be discussed.

Tuesday 10 April

CERN COLLOQUIUM

at 16.30 hrs – Auditorium

Spin-polarized hydrogen

by Daniel KLEPPNER / Laboratoire de spectroscopie hertzienne, Ecole normale supérieure, Paris, and Massachusetts Institute of Technology, Cambridge, Mass.

Wednesday 11 April

PS SEMINAR

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

The Tevatron – A report on a superconducting accelerator

by M. HARRISON / FERMILAB

Wednesday 11 April

CAS ACCELERATOR SEMINAR

at 14.30 hrs – LEP Auditorium
(top floor of bldg. 30)

High voltage vacuum insulation – The physical origin of prebreakdown electron emission currents

by R.V. LATHAM / University of Aston, UK, and CERN

Wednesday 11 April

DD SEMINAR

at 16.00 hrs – DD Amphitheatre
(bldg. 31, 3rd fl.)

Use of MICE as front end in the OMEGA data acquisition system

by J.-P. DUFÉY

Thursday 12 April

ISOLDE SEMINAR

at 10.30 hrs – Conf. Room S-013, bldg. 4

Nuclear physics at ISOLDE with laser

by S.A. AHMAD

Thursday 12 April

PRESENTATION

at 14.00 hrs – DD Amphitheatre
(bldg. 31, 3rd fl.)

Presentation of the smallest Unibus – based VAX system, (VAX-11/725) and planned enhancements to the VAX-11/780, plus introduction to the VT200 family of terminals

by Douglas THOMPSON / Digital Geneva

Thursday 12 April

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium

**Latest results from the
IMB proton decay detector**

by J. VAN DER VELDE / University of
Michigan, Ann Arbor, and LAL, Orsay

Friday 13 April

CERN COMPUTER SEMINAR

10.00 to 16.00 hours – Auditorium

FORTTRAN forum

The committee responsible for the development of FORTRAN standards, X3J3 of ANSI, is currently engaged in a new revision of the language. The new standard, presently called FORTRAN 8x, is expected to be released in about 1988. The FORTRAN Forum is intended to give European users an overview of the current status of the revision, and to allow discussion between users and members of X3J3. The presentations will emphasise the proposed array processing and data abstraction features of FORTRAN 8x, as well as describing more general aspects of the language. This is likely to be the last direct contact between X3J3 and European users before the publication of the draft standard in 1985.

Agenda

10.00 Opening remarks, Jean ADAMS / Colorado St. Univ., chairman of X3J3

10.15 Overview of FORTRAN 8x, Neldon MARSHALL / EG&G

11.15 Coffee

11.30 Data abstraction, Jerry WAGENER / Amoco

12.30 Lunch

14.00 Array processing, George PAUL / IBM

14.45 Coffee

15.00 Panel discussion :

Ted CROWLEY / CSP

Kurt HIRCHERT / Univ. of Illinois

David WILLIAMS / CERN

Julius ZOLL / CERN

Contact

The speakers will be at CERN for the whole week 9-13 April, and may be contacted through M. Metcalf, phone 4427 or 6111 beep 5558.

Friday 13 April

MEMORIAL GATHERING

at 14.30 hrs – Council Room

**In honour of the late
Vladimir Jurko Glaser**

Organized by Theory Division, the gathering will include tributes to Jurko Glaser's human qualities and scientific achievements by J. Bros, H. Epstein, H. Lehmann, A. Martin and W. Thirring.

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

ENSEIGNEMENT GÉNÉRAL

Tél. 2844

Jeudi 5 avril

de 13.00 h à 13.30 h – Amphithéâtre

Science pour tous

par R. CARRERAS

ACADEMIC TRAINING

Tel. 2844

2, 3, 4, 5 and 6 April

at 11.00 hrs – Auditorium

Identifying and assessing risks

by T.A. KLETZ / University of Technology,
Loughborough

Lectures 1 to 5.

Thursday 12 April

INFORMATION MEETING FOR SECRETARIES

at 11.00 hrs – Barrack 593, Room 11

**Administrative Data Processing and
Decision Support Systems at CERN**

by G.V. FRIGO

- *the place and role of Management Information Data Processing from the organisational and computing points of view,*
- *data and information : where it comes from, where it goes to,*