

COMMUNICATIONS OFFICIELLES

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

OFFICIAL NEWS

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

COMMISSION EXECUTIVE DU CERN

A sa 33^{ème} réunion le jeudi 26 janvier 1978, la Commission exécutive a examiné les principales propositions de modification des Statut et Règlement du Personnel du CERN, qui seront étudiées par un Groupe de travail du Comité des Finances. La Commission a également discuté du projet de document intitulé "Enquête sur la condition sociale du personnel du CERN", qui sera soumis au même Groupe de travail du Comité des Finances. La principale question est de savoir à quoi le CERN devrait être comparé, les Organisations coordonnées ou les Laboratoires similaires dans les Etats membres, et en particulier en Suisse.

La Commission exécutive a ensuite examiné un projet de Catalogue des descriptions d'emplois. Il a été souligné que ce document sera l'objet d'une révision continue, avec la participation active du personnel. Il a été convenu que le

Catalogue sous sa forme actuelle servira de document de travail pour l'examen 1978 du personnel et des postes du CERN.

La Commission a pris note de la présentation que fera L. Van Hove à la prochaine réunion du SPC, concernant le programme du SPS.

La Commission exécutive a approuvé le principe d'un projet d'achat de "Six aimants MBPL (2m PS) destinés à servir de spectromètres dans les expériences du SPS". La décision sera arrêtée après étude de la liste de tous les investissements à prévoir pour cette année.

Le problème de l'amélioration des communications entre la Direction et le personnel du CERN a été abordé.

La Commission exécutive a enfin discuté de la question des contrats de 44 heures. Elle sera débattue avec le Comité consultatif permanent.

SEMINARS SEMINAIRES

MONDAY 20 FEBRUARY

EP SEMINAR

at 11.00 hrs - EF Conference Room
(Bldg.13-2-005)

"Search for six-quark bound state"

by I.H. Chiang / BNL

Abstract : This experiment was done at BNL-AGS, where 5 GeV primary beam was brought to experimental hydrogen target. The experimental set up used a double arm spectrometer. The reaction was $pp \rightarrow K^+K^+X$. We were searching for "H", called by R. Jaffe, with $m(X)$ being less than two lambda masses.

The following results could be deduced :

- 1. The emission of direct neutrons is nearly independent of the nucleus in agreement with predictions.*
 - 2. The distribution of neutron multiplicities can be described by an intra-nuclear cascade calculation.*
 - 3. Strong correlations between cp have been observed even for heavier emitted clusters (3H , α , 3He).*
 - 4. The excitation of high spin states is in fair agreement with recent calculations.*
- Few remarks are added : 1. on an evidence for high excitations in μ^- absorption by an activation method, 2. on an unsuccessful search for $4n$.*

CERN NUCLEAR PHYSICS SEMINAR

at 16.00 hrs - Theory Conference Room

"Particle emission after π^- absorption in nuclei"

by R. Engfer / Univ. of Zürich

Abstract : The π^- absorption in nuclei in principle is a reaction to study nucleon correlations and de-excitation mechanism of highly excited compound states in nuclei. Spectra of neutrons (n) and charged particles (cp) together with $n-n$ and $cp-cp$ correlations after π^- absorption in several nuclei were measured at SIN.

TUESDAY 21 FEBRUARY

WEDNESDAY 22 FEBRUARY

SPS EXPERIMENTS COMMITTEE

Agenda for the fifty-second meeting

- Open Session / Tuesday 21 February
at 09.00 hrs - Auditorium

1. A 4π solid angle detector for the SPS used as a proton-antiproton collider at a centre of mass energy of 540 GeV (Aachen-AnneCy-Birmingham-CERN-Collège de France-Queen Mary College-UCL Riverside-Rutherford-Saclay collaboration; spokesman : C. Rubbia; SPSC/78-6/P 92).

2. Proposal to study antiproton-proton interactions at 540 GeV CM energy (CERN-Saclay-Orsay collaboration; spokesman : P. Darriulat; SPSC/78-8/P 93).
 3. Search for magnetic monopoles (Annecy-CERN collaboration; spokesman : P. Musset; SPSC/78-15/P 96).
 4. Search for quarks at the $p\bar{p}$ collider (Bologna (INFN & Univ.)-CERN collaboration; spokesman : A. Zichichi; SPSC/78-16/P 97).
 5. The measurement of elastic scattering and total cross-section at the $p\bar{p}$ collider (CERN-UCL Riverside collaboration; spokesman : G. Matthiae; SPSC/78-11/I 100).
 6. Proposal to study Ω^- decays and the $\Sigma^- \rightarrow n e^- \bar{\nu}$ decay mode in the hyperon beam (Bristol-Geneva-Heidelberg-Orsay-Rutherford-Strasbourg collaboration; spokesman : J.-M. Gaillard; SPSC/78-12/P 94).
 7. Proposal to measure charmed particle production in hadronic reactions (Amsterdam-CERN-Cracow-Munich MPI-Rutherford collaboration; spokesman : R. Klanner; SPSC/78-14/P 95).
- Closed Session / Wednesday 22 February
at 09.00 hrs - Conference Room, 6th Floor
(ADM Bldg - 60)

TUESDAY 21 FEBRUARY

PRESENTATION TECHNIQUE

de 09h00 à 16h30 - Salle de conférence EP
(Bât.21 - 1er ét. - Bur.1-067 - E4 plan CERN)

H. SCHURTER AG (CH) expose : fusibles et porte-fusibles pour châssis et circuits imprimés, lampes de signalisation, accessoires de contrôle (points tests, fiches ...) (CH), fusibles (avec supports), installation BT 6 à 630 A (CH/D), interrupteurs miniatures, subminiatures, étanches et protégés pour circuits imprimés (soudure et lavage à la vague) de ALCO et SADAR (USA).

Langue : français

Renseignements : M. Diraison / FI / 4585

CERN COLLOQUIUM

at 16.30 hrs - Auditorium (*)

"A magnetic storage ring for neutrons"

by U. Trinks / Inst. Laue-Langevin,
Grenoble

Abstract : A superconducting magnetic storage ring for very slow neutrons came into operation at the ultra cold neutron beam of the ILL-Grenoble. The principle of the ring is analogous to that of a storage ring for charged particles. Due to the interaction of the magnetic moment with a magnetic field for bending and focusing of the neutrons one needs multipole fields of one order higher than in the case of charged particles : dipoles and quadrupoles are replaced by quadrupoles and sextupoles respectively. Stored neutrons could be detected up to 45 minutes after injection.

(*) Note : Those attending this colloquium are cordially invited to the Salle des Pas Perdus (just outside the Council Chamber) at 16.00 hrs to meet the speaker and for informal discussion. Tea and coffee will be provided.

WEDNESDAY 22 FEBRUARY

PRESENTATION TECHNIQUE

de 10h00 à 16h00 - Salle de conférence
Magasins - Bât.73-2e ét.-Bur.2-027

SOVCOR (F) présente son programme de fabrication et de représentation : résistances couche métallique et condensateurs verre, condensateurs tantale et céramique de Corning (USA).

Langue : Français

Renseignements : M. Diraison / FI / 4585

THEORETICAL SEMINAR

at 14.00 hrs - Theory Conference Room

"Parton model ideas and quantum chromodynamics"

by C. Sachrajda / CERN-TH

Abstract : So far the only "hard scattering process" which can be rigorously treated in quantum chromodynamics is deep inelastic lepton-hadron scattering. I will review a new perturbative approach for calculating the asymptotic behaviour of hard scattering processes, and will discuss the implications for processes such as massive lepton pair production and the inclusive production of particles or jets with large transverse momenta in hadronic collisions. It will be found that many parton model ideas are reproduced. The equivalence of this approach with the standard renormalization group approach to deep-inelastic lepton-hadron scattering will be demonstrated.

PRESENTATION TECHNIQUE

de 14h30 à 16h30 - Salle de conférence EF
Bât.17-1er ét.-Bur.1-007

La maison DIGITRADE AG (CH), représentant BIELER et LANG (D), propose la démonstration d'une nouvelle gamme de détecteurs et d'appareils auxiliaires pour la réalisation de systèmes d'alarme (fuite de gaz combustible).

Langue : Français

Renseignements : M. Diraison / FI / 4585

DD SEMINAR

at 16.00 hrs - DD Conference Room
(Bldg.31 - 3rd floor)

"New computer control languages - can they be simple and yet powerful?"

by P.T. Jensen / CERN-DD

Abstract : Compared with programming languages, current computer control languages have a rather poor expressive power as indicated by their primitive structures and the overwhelming number of parameters. The question in the title will be answered in the positive by describing a control language which - is simple and easy to remember, - is common for both interactive and batch use, - relies on well-known concepts from programming languages. The seminar will stress primarily the following aspects : a) control language variables and block structure, b) access to permanently stored data. Currently the system is implemented only on IBM machines.

THURSDAY 23 FEBRUARY

ESO ASTROPHYSICS SEMINAR

at 11.30 hrs - DD Conference Room
(Bldg.31 - 3rd floor)

"Luminosity indicators in the spectra
of quasars"

by J. Baldwin / Cambridge

Abstract : Recent observations confirming the correlation between the emission-line strengths and luminosities of quasars are described. These results should soon allow us to use quasars as standard candles for cosmological tests.

CERN COLLOQUIUM

at 16.30 hrs - Auditorium (*)

"Lunar palaeomagnetism and evidence for
superheavy elements in the Moon"

by S.K. Runcorn / Univ. of Newcastle-upon-
Tyne

Abstract : The discovery of remanent magnetization of the Apollo lunar samples was unexpected as the Moon today possesses no general magnetic field. Lunar palaeomagnetism and the discovery of lunar magnetic fields on the surface of the Moon in various experiments must be interpreted in terms of the Moon possessing an early magnetic field which has since been lost. This requires 1) the Moon to have melted to the centre a few hundred million years after its accretional origin, and 2) a heat source in the core to generate by dynamo action these fields, palaeointensity measurements of which are as high as $1.3 \text{ gauss } 4 \times 10^9 \text{ years ago}$. It is argued that superheavy elements existed in the Moon in its early history causing the melting and because they are expected to be siderophile, became the core heat source. On this hypothesis, the half life must lie between $1 \text{ and } 2 \times 10^8 \text{ years}$.

FRIDAY 24 FEBRUARY

SPECIAL DD SEMINAR

at 14.00 hrs - DD Conference Room
(Bldg.31 - 3rd floor)

"A pipelined parallel synchronous processor
for high speed array processing"

by G.P. O'Leary / Floating Point Systems,
Inc.

Abstract : The hardware architecture and software of the AP-120B Floating Point Array Processor will be discussed in detail. The AP-120B is designed

as a programmable auxiliary processor to a host computer system. Its purpose is to perform high speed array processing for lengthy computations such as fast Fourier transforms (FFT), convolutions, matrix arithmetic, vector analysis, etc. The high computational speed (up to 60-million instructions per second, 12 million floating point operations per second) is achieved through parallel operation of arithmetic units, accumulators and memory units. The system consists of a number of fast register, program source memory, data memory, table memory floating point adder and floating point multiplier. These are all interconnected by seven parallel synchronous data paths which allow simultaneous operation during a given 167 ns clock cycle. The processor is programmable from the host computer either by assembly language or by program routines callable from the host computer's FORTRAN (such as vector add, complex vector multiply, FFT, matrix inverse, etc.).

MONDAY 27 FEBRUARY

CERN NUCLEAR PHYSICS SEMINAR

at 16.00 hrs - Theory Conference Room

"Electron scattering and the structure of
 ^3He and ^4He "

by I. Sick / Univ. of Basel

TUESDAY 28 FEBRUARY

CERN COLLOQUIUM

at 16.30 hrs - Auditorium

"Catastrophe theory and its applications"

by T. Poston / Battelle Advanced Studies
Center, Geneva

THURSDAY 2 MARCH

CERN COLLOQUIUM

at 16.30 hrs - Auditorium

"Mathematical models for the spread of
epidemics"

by K. Dietz / Univ. Tübingen - Inst. für
Medizinische Biometrie

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POUR INFORMATION / FOR INFORMATION

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MARDI 21 FEVRIER

CONFERENCE DE L'EPFL

à 17h15 - Auditoire DE 50, 16 chemin de
Bellerive à Lausanne

"Une approche "industrielle" du traitement
d'images"

par J.-F. Longchamp / Inst. de Recherches
Robert Bosch, SA 1027 Lonay

Résumé : La connaissance de la position d'objets dans un champ d'observation est souvent la clef de nombreux problèmes d'automatisation industrielle, tels que le contrôle, le triage de pièces, leur assemblage, etc. L'automatisation d'opération simples peut entraîner la mise en

action de dispositifs coûteux et complexes, surtout si l'on songe à l'analyse électronique des images. On montre qu'il existe, dans ce cas, une approche spécifique des problèmes pouvant simplifier le traitement ultérieur des signaux. Il s'agit avant tout de faire participer le système optique au traitement global de l'image. Cet exposé sera illustré par un film.

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

(Secrétariat : Tél. 2844)

WEDNESDAY 22, THURSDAY 23,
FRIDAY 24 FEBRUARY

ACADEMIC TRAINING

at 11.00 hrs - Auditorium

"The QCD catechism : why believe it?
How to test it"

by A. de Rújula / Lectures 1, 2 and 3.

Lectures 4, 5 and 6 will be given next week on
March 1, 2 and 3 at the same time and place.
For abstract, see last week's Bulletin and
notices.

WEDNESDAY 22 FEBRUARY

ACADEMIC TRAINING

at 16.30 hrs - Auditorium

"General science monthly cross-section"

by R. Carreras

JEUDI 23 FEVRIER

ENSEIGNEMENT GENERAL

de 13h00 à 13h30 - Amphithéâtre

"Science pour Tous", par R. Carreras

Thème principal : Le sel et le goût du sel.

INFORMATIONS **GENERALES** GENERAL **INFORMATION**

ON RECHERCHE ...

Une horloge digitale a été empruntée fin janvier dans la baraque 760 du hall 183. Cette horloge sert à tester du matériel nouveau. La personne qui l'a empruntée est priée de la remettre en place ou de prendre contact avec M. INSOMBI Albert / EF - Tél. 2114 ou 3535 - pour avoir le mode d'emploi.

APPRENTISSAGES

Comme chaque année, le CERN engagera 2 ou 3 apprentis dans chacun des métiers suivants :

- "Employé de laboratoire en physique"
(durée : 3 ans)
- "Mécanicien-electronicien"
(durée : 4 ans).

Début de l'apprentissage : 1er août 1978.

Date limite de réception des candidatures :
25 mars 1978.

L'apprentissage s'effectue selon la législation genevoise et permet l'obtention du certificat fédéral de capacité.

Conditions minima :

- résider en Suisse ou en zone frontalière,
- avoir accompli la scolarité obligatoire (15 ans révolus).

Les personnes ayant des enfants intéressés par l'un ou l'autre de ces métiers sont priées de se mettre en rapport le plus tôt possible avec le Service de l'Enseignement (tél. 2460-2844), afin d'obtenir tous les renseignements nécessaires ainsi que la formule de candidature.

M. Viader / Tél. 2844

BICYCLETTES ET VELOMOTEURS

A partir du 1er mars 1978, les bicyclettes et vélomoteurs traînant sur le site et non repérés clairement, seront ramassés et stockés au Service récupération.

Division SB / Serv. récupération

BICYCLES AND MOTORCYCLES

As from 1st March 1978, bicycles and motorcycles which are left on the site and are not clearly marked will be collected and held by the Salvage Service.

SB Division / Salvage Service

**WARNING!
AGAINST
THEFTS OF ALL
KINDS, PLEASE
MAKE YOUR
OWN PROTECTION.**

**ATTENTION :
SOYEZ
PRUDENTS! DE
NOMBREUX
VOLS ONT ETE
SIGNALES CES
DERNIERS TEMPS.**