

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

PROLONGATION OF CO-ORDINATOR FOR THE SYNCHRO-CYCLOTRON

Dr. R. Neugart (EP Division) will continue his functions as Physics Co-ordinator for the Synchro-Cyclotron for another year, i.e. until 30 September 1982.

Herwig Schopper
Director-General

COMITE DE GESTION DE LA CAISSE D'ASSURANCES

Lors de ses trois dernières réunions, tenues les 28 juillet, 18 août et 8 septembre 1981, le Comité de Gestion de la Caisse d'Assurances a étudié deux aspects de la mise en œuvre des décisions du Conseil de juin relatives au régime des pensions de l'Organisation, à savoir :

- la révision des Statuts de la Caisse, destinée d'une part à la prise en compte des ajustements des prestations et des modifications des cotisations et, d'autre part, à lever certaines ambiguïtés existantes;

- l'élaboration de la méthode de calcul applicable aux versements complémentaires à effectuer par le personnel en activité et les pensionnés qui le désirent, ainsi que par l'Organisation.

Le Conseil a demandé que des propositions lui soient soumises à cet égard à sa session de décembre prochain.

C.J. Zilverschoon
Président du Comité de Gestion

SEMINARS **SEMINAIRES**

Lundi 5 Octobre

CONFERENCE D'INFORMATION SUR LE LEP (No.4)

à 11h.00 - Amphithéâtre
(Retransmission en direct par TV dans la Salle du Conseil et les Amphithéâtres ISR et SPS)

'Radiation et Pollution'

par K. Goebel

De l'ensemble des problèmes de radiations, ce sont les influences radiologiques du LEP sur l'environnement qui intéressent le plus les membres du personnel. Les premières études faites dans ce domaine ont été achevées et les résultats furent publiés cet été. Entre autres, les doses de radiation et de radioactivité, et également la concentration des gaz nocifs à l'extérieur des clôtures des futures installations. Ces résultats seront l'objet de discussions et comparés avec les normes de la radioprotection et avec la situation actuelle dans la région.

Tuesday 6 October

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs - Auditorium *)

'Hadronic Final States in Muon Interactions'

by H.E. Montgomery / CERN

A review will be given of the experimental situation regarding hadrons produced in the deep inelastic scattering of muons, based on the rapporteur's talk given on this subject by the speaker at the Bonn Conference.

*) Note : Those attending this seminar 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 discussions. Tea and coffee will be provided.

Wednesday 7 October

ISOLDE SEMINAR

at 10.30 hrs - SC Conference Room
(Building 26, Room 1-025)

'Target Fragmentation from 10 MeV/A to 2100 MeV/A'

by K. Aleklett / Studsvik

Target fragment yields, average energies and momenta in the reactions of carbon-12, oxygen-16 and neon-20 with tantalum-181 and gold-197 at 12 different projectile energies ranging from 10 to 2100 MeV/A, have been measured. The data support the conclusion that there is a slow continuous evolution of reaction mechanism(s) which differ for collisions involving different impact parameters. The results are best described by the generalized firebreak model.

PS SEMINAR

at 11.00 hrs - PS Auditorium (Building 6)

'A New Treatment of the Space-Charge Effects Including Image Charges'

by V.G. Vaccaro / Naples Univ.

We are faced with the following problem : what is the evolution of a bunch of particles in the case that no radio-frequency is applied to it? Other fields come into play, the higher the field the larger is the charge density, due to the Coulomb interaction among the particles and their images. These fields depend on the shape of the bunch, while they deform the bunch itself. Therefore, to solve this problem one has to study and combine the following two :

i) the electromagnetic force or effect, namely : from the distribution of particles find the e.m. forces under given boundary-conditions (i.e. taking into account the image charges too);

ii) the dynamics of the particles, namely : from the e.m. forces find the motion. Self-consistency is ensured by combining the relevant equations with the conservation law. The resulting non-linear equation is thoroughly studied. General results have been obtained, suitable for design criteria. They have been applied to IKOR, in the SNQ (neutron spallation source) project.

THEORETICAL SEMINAR

at 14.00 hrs - Theory Conference Room

'All Self-Dual Multimonopoles for Arbitrary Gauge Groups'

by W. Nahm / CERN

The ADHM construction of multi-instantons is adapted to static multimonopoles in the limit of the vanishing Higgs potential. All such multimonopoles can be constructed by this method from solutions of an ordinary differential equation.

Mercredi 7 Octobre

PRESENTATION TECHNIQUE

09h00/12h00 et 14h00/16h00

Bâtiment 17, Salle 1-007

ElectroMagnetic Compatibility Fribourg/Condensateurs Fribourg SA (CH) propose en démonstration :

1) STAR, appareil de mesure et d'analyse statistique des réseaux d'énergie électrique basse et moyenne tensions : fluctuation de tension, harmoniques 50-1500 Hz, surtensions 1-100 μ s, microcoupures 0,1 - 10 ms dans les réseaux électriques de distribution. Les décisions de mesure sont prises par un échantillonneur et par un détecteur de perturbation. Résultats : liste chronologique des événements, représentation graphique et statistique des mesures et des perturbations pour une référence choisie.

2) Cages de Faraday de Universal Shielding Corporation (USA) pour l'immunisation aux perturbations modulaires, dimensions variées.

Langues : Allemand, anglais, français.

Renseignements : M. Diraison / FI / 4585.

Thursday 8 October

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs - Auditorium *)

'Single Elementary Particle at Rest in Space : Electron/Positron Magnetic Moments'

by H. Dehmelt / Univ. of Washington, Seattle

An individual elementary particle kept at rest in free space for extended periods is an ideal object for high resolution spectroscopy. All external causes for line broadening or shifts including 1st and 2nd order Doppler and transit time effects are eliminated for such a system. High resolution spectroscopy on an individual electron/positron localized to less than 200 microns by r.f. side band cooling in a Penning trap employing a 50 kG field has already yielded the most precise data on the magnetic moments of these particles and also provided a severe test of the CPT theorem for charged elementary particles. Furthermore, the close localization of an elementary particle in space is one of the most fundamental problems in physics and worthy of study on its own merit.

*) Note : Those attending this seminar 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 discussions. Tea and coffee will be provided.

Tuesday 13 October

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs - Auditorium

'Recent Developments in Multiparticle Dynamics'

by L. Van Hove / CERN

Wednesday 14 October

ISR SEMINAR

at 14.30 hrs - ISR Auditorium
(Top floor of Building 30)
'Superconducting Magnets at ISABELLE'
by M.J. Tannenbaum / B.N.L.

DD SEMINAR

at 16.00 hrs - DD Auditorium
(Building 31, 3rd floor)
'CSIRONET : An Australian General Purpose
Computing Network'
by F. Vezis / Division of Computing Research,
CSIRO

Thursday 15 October

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs - Auditorium
'Measurement of the Cross-Section of Anti-
neutrino Scattering on Electrons'
by M. Jonker / NIKHEF/H Amsterdam -
CHARM Collaboration

FOR INFORMATION / POUR INFORMATION

Friday 9 October

LAPP SEMINAR

at 10.30 hrs - LAPP Auditorium
(Laboratoire d'Annecy-le-Vieux de Physique des
Particules, Chemin Bellevue, Annecy-le-Vieux,
Haute-Savoie, France)
'Soft Elastic Negative Pion-Proton and Proton-
Proton Scattering'
by J.P. Martin / CERN and Lyon

The results of the NA8 experiment performed at CERN will be presented. It consists of the measurement of the real part of the forward scattering negative pion-proton and proton-proton amplitudes, as well as the diffraction cone slope parameters at a mean squared momentum transfer of -0.02 (GeV/c)^2 and in the energy range up to 345 GeV. Two main subjects will be discussed : - real part and the predictions through dispersion relation of the s dependence of the pion-proton cross-section at energies higher than 400 GeV; - hypothesis and experimental evidence for a universal shrinkage of the diffraction cone at high energies.

Renseignements complémentaires auprès de Ch. Baglin/
CERN-EP, Tél. 4657, ou Laboratoire d'Annecy-le-
Vieux, Tél. (023) 23.32.45, int.327.

INFORMATIONS

GENERALES

GENERAL INFORMATION

RADIATEURS ELECTRIQUES

Comme chaque année, en vue de réduire les dépenses d'énergie, la Division SB essayera de retarder le plus possible la mise en route du chauffage général du site et espère pouvoir la différer jusqu'à la 2ème quinzaine d'octobre.

Les économies espérées seraient évidemment neutralisées si on avait recours de manière inconsidérée à des radiateurs électriques d'appoint.

Nous prions donc instamment toutes les personnes qui y recourront pour tempérer leur bureau à leur arrivée le matin d'utiliser ces radiateurs avec le maximum de modération.

O. Barbalat /
Coordinateur pour l'Energie

ELECTRIC HEATERS

In accordance with its normal practice at this time of the year, the SB Division will try to delay turning on the site's central heating system for as long as possible. It is hoped that heating will not be needed till the second half of October.

It is obvious that if undue use is made of electric heaters, the anticipated savings will be lost.

We therefore urge those who use electric heaters for warming their offices when they arrive in the morning to use them as sparingly as possible.

O. Barbalat /
Energy Coordinator