

## 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

### A toute personne travaillant dans le Hall EHN1

Veuillez noter qu'à partir du 15 juin 1978 le hall d'expérience EHN1 sera considéré comme une Zone Contrôlée "Radiation". Toute personne qui travaille dans ce hall ou dans d'autres zones contrôlées pendant plus de quatre heures par semaine doit être médicalement apte à travailler en zone radioactive et porter un film badge.

Groupe Radioprotection  
Division HS

### To all persons working in EHN1

Please note that as from 15 June 1978 the experimental hall EHN1 will be regarded as a Controlled Radiation Area. All persons working there or in the controlled areas for more than 4 hours per week must have passed the necessary medical examination and must wear their film badges.

Radiation Protection Group  
HS Division

## SEMINARS SEMINAIRES

### MONDAY 12 JUNE

#### EP SEMINAR

at 11.00 hrs - EF Conference Room  
Bldg 13-2-005

"The Fastbus : status and personal comments"  
by P. Kunz/SLAC

*Abstract : The U.S. NIM committee has formed the fast system design group (F.S.D.G.) for the purpose of designing a standard interface system which will meet the needs of high energy physics in the 1980's. The new standard will attempt to satisfy the requirements of speed and pre-processing with a reduction of overall cost. A description will be given of the current status of this project with a description of the direction along which the standard is being formed.*

#### CERN NUCLEAR PHYSICS SEMINAR

at 16.00 hrs - TH Conference Room

"Virtual pions in real nuclei, critical opalescence and pion condensation "par un borgne pour les aveugles"

by A. Figureau/CERN & M. Ericson/Lyon University

*Abstract : A description of the nuclear pion field which incorporates meson-exchange corrections is given. This approach is applied to the study of the pion condensation phase transition. The large enhancement of the pion field by exchange effects for certain momentum transfers is a critical opalescence phenomenon. It originates from the existence of a short-range order in the medium, precursor to the long-range order of pion condensation.*

### TUESDAY 13 JUNE

#### SC COMMITTEE - Open session

at 09.30 hrs - Council Chamber

#### PROVISIONAL AGENDA

1. Adoption of the Agenda
2. Minutes of the meeting of 7 March 1978 (CERN/SCC/78-10)
3. Introductory remarks by P. Falk-Vairant
4. Announcements
5. Report on the Meeting of the SC Committee held on 2 May 1978 and of the Research Board held on 25 May 1978 (V. Soergel)
6. First results from the He<sup>3</sup> beam (T. Bressani, P.G. Hansen)
7. Recent ISOLDE results and future programme (R. Klapisch)
8. Status Reports on experiments in progress and requests for machine time.
  - SC 64 Tests for Fast Separations of Nuclear Reaction Products (K. Bächmann)
  - SC 70 Studies of Fission of Heavy Nuclei Induced by Muons (G. Tibell)
  - SC 73  $\pi^-$  Backward Scattering on Nuclei (G. Dellacasa)

#### SC COMMITTEE - Closed session

at 14.30 hrs - Conference Room - 6th floor  
Administration Building

#### CERN PARTICLE PHYSICS SEMINAR

at 16.00 hrs - Auditorium (\*)

"Charged currents results from the CDHS Collaboration"

by P. Bloch/Saclay

*Abstract : New results from the CERN-Dortmund-Heidelberg-Saclay collaboration on charged current data. The  $y$  and  $x$  distributions are presented and particular emphasis will be given to scaling violation.*

(\*) Note : Those attending this seminar are cordially invited to the Salle des Pas Perdus (just outside the Council Chamber) at 15.30 hrs to meet the speaker and for informal discussions. Tea and coffee will be provided.

## WEDNESDAY 14 JUNE

### PRESENTATION TECHNIQUE

de 9h00 à 16h00 - Salle EF  
Bât. 17-1-007 (F-6 plan CERN)

La maison OSL (F) expose des ensembles et sous-ensembles de mécanique électronique : châssis, tiroirs, coffrets, porte-cartes, boîtiers, cassettes etc. aux normes NIM, CAMAC, SOMAC, EURO-NORM. Plus exécution de mécanique de précision selon demande (exemple corps de caméra).

Langue : français

Renseignements : M. Diraison/FI/4585

### THEORETICAL SEMINAR

at 14.00 hrs - TH Conference Room

"Applications of QCD to processes involving large momentum transfer"

by R.D. Field/ CALTECH

*Abstract :* First, a review of the phenomenological applications of QCD to the lepton initiated processes  $ep$ ,  $\mu p$  and  $\nu p$  and to the production of large mass muon pairs in  $pp$  collisions will be given. The degree to which the quark and gluon distributions within a proton,  $G(x, Q^2)$ , are determined experimentally will be discussed and the QCD expectations for the scale breaking of the quark and gluon fragmentation functions,  $D(z, Q^2)$ , will be examined. Second, it is shown that if in a calculation of high-transverse-momentum meson production in  $pp$  collisions one includes not only the scale-breaking effects that are expected from asymptotically free theories but also the effects due to the transverse momentum of quarks and gluons within hadrons, then the results are not inconsistent with the existing data. Finally, some large  $p_{\perp}$  correlations will be examined and the experimental evidence for gluon jets discussed.

### DD SEMINAR

at 16.00 hrs - DD Amphitheatre  
Bldg 31 - third floor

"The 168/E Microprocessor"

by P. Kunz/SLAC

*Abstract :* A description will be given of the 168/E microprocessor project. The execution speed of the processor is comparable to an IBM 370/168. The processor also "emulates" a sufficiently large subset of the IBM 370/360/370 instruction set, that programs may be written in it in FORTRAN. The cost of the processor is low enough that it is reasonable to construct a multiprocessor system for use in on-line or off-line data analysis.

## THURSDAY 15 JUNE

### ESO ASTROPHYSICS SEMINAR

at 14.00 hrs - ESO Conference Room  
Bldg 593

"Radio sources associated to clusters of galaxies"

by J. Roland/Observatoire de Meudon

*Abstract :* General properties - Head tail radio galaxies, radio halo and radio sources with steep spectra associated to X-ray clusters of galaxies.

## CERN PARTICLE PHYSICS SEMINAR

at 16.00 hrs - Auditorium (\*)

"The high- $P_{\perp}^2$  structure of spinning protons"

by A.D. Krisch/Michigan University

*Abstract :* The differential cross section for proton-proton elastic scattering at high- $P_{\perp}^2$  was measured at 11.75 GeV/c using the Argonne ZGS polarized proton beam and the Michigan-Argonne PPT-V polarized proton target. The spin-orbit forces parameterized by  $A$  become quite small at high- $P_{\perp}^2$ . However the spin-spin forces parameterized by  $A_{nn'}$  increase abruptly near  $P_{\perp}^2 = 3.6(\text{GeV}/c)^2$  exactly at the value where the "hard-scattering" component becomes dominant. By  $P_{\perp}^2 = 4(\text{GeV}/c)^2$  the spin-parallel cross section  $d\sigma/dt(\uparrow\uparrow)$  is twice as large as the spin-anti-parallel  $d\sigma/dt(\uparrow\downarrow)$ . If the "hard" elastic scattering is caused by the protons' constituents, then this data implies that the direct scattering of constituents rarely occurs unless their spins are parallel.

(\*) *Note :* Those attending this seminar are cordially invited to the Salle des Pas Perdus (just outside the Council Chamber) at 15.30 hrs to meet the speaker and for informal discussions. Tea and coffee will be provided.

## VENDREDI 16 JUIN

POUR INFORMATION

/ FOR INFORMATION

à 10h30 - Amphithéâtre du LAPP

Laboratoire d'Annecy-le-Vieux de Physique des Particules - chemin Bellevue, Annecy-le-Vieux, (Haute-Savoie, France)

"Analyse des données de l'expérience S 132 (protons de 24 GeV/c - production du  $J/\psi$  près du seuil - spectres de production et corrélations transverses hadron-hadron"

par M. Gouanere/LAPP

*Résumé :* L'exposé porte sur l'analyse des données de l'expérience S132 (Bispectromètre symétrique à focalisation) :

- mesure de section efficace du  $J/\psi$  près du seuil. Conséquence sur la production éventuelle de particules associées au  $J/\psi$
- spectres de production et corrélations transverses hadron-hadron. La corrélation a été mesurée pour les différentes paires de hadrons ( $\pi^+\pi^-$ ,  $\pi^+K^-$ ,  $\pi^+p^-$ , etc.).

Renseignements complémentaires auprès de H. PESSARD  
CERN-EP, Tél. 65.26 ou Laboratoire d'Annecy-le-Vieux, Tél. (023) 23.32.45, int. 327.

## MONDAY 19 JUNE

### EP SEMINAR

at 11.00 hrs - EF Conference Room  
Bldg 13-2-005

"The Jet-chamber system, a pictorial drift chamber for the JADE detector at PETRA"

by J. Heintze/Physikalisches Institut der Universität Heidelberg

#### ISR SEMINAR

at 14.30 hrs - ISR Auditorium  
top floor of building 30

"Beam monitoring using stochastic signals"

by J. Borer/CERN

#### CERN JOINT NUCLEAR PHYSICS & PARTICLE PHYSICS SEMINAR

at 16.00 hrs - TH Conference Room

"Proposal for a macroscopic search of  
nonlinear terms in Maxwell's equations"

by E. Zavattini/CERN

### **TUESDAY 20 JUNE**

#### CERN COLLOQUIUM

at 16.00 hrs - Auditorium

"Lev Landau - Life and Work"

by F. Janouch/Research Inst. of Physics  
Stockholm

### **FRIDAY 23 JUNE**

#### CERN SPECIAL SEMINAR

at 16.00 hrs - Auditorium

"Recent results from the lead glass wall  
experiment at SPEAR"

by D.H. Miller/Northwestern University

## **TRAINING AND EDUCATION ENSEIGNEMENT**

### **JEUDI 15 JUIN**

#### ENSEIGNEMENT GENERAL

13h00 - 13h30 - Amphithéâtre

"Science pour tous"

par R. Carreras

## **INFORMATIONS**

# **GENERALES**

## **GENERAL INFORMATION**

#### NOTICE FROM SB DIVISION

#### RESTRICTIONS ON WATER AND ELECTRICITY SUPPLIES TO THE MEYRIN SITE DUE TO MAINTENANCE WORK

1. Water supply - drainage of the Swiss and French  
barrage reservoirs located on the Rhône.

The Services Industriels de Genève, in a joint operation with the corresponding French services, will shortly be emptying the barrage reservoirs of the Rhône hydro-electric stations. This operation, which takes place every three years has a direct effect on the cooling water supply for the Meyrin site, normally provided by three wells sunk in the water table near the Rhône at Peney. The lowering of the Verbois barrage réservoir level from 369 m to the minimum of 353 m will affect the level of the water table, and thus considerably reduce the amount of water that can be pumped. Excessive pumping would tend to increase the infiltration of water from the Rhône through the gravel strata, with detrimental effects on the water table, and cause sand to be carried into the wells.

During the critical period of the drainage operation (from 6 to 11 June) and for the three weeks or so required for the water table to stabilize, the Meyrin site will be mainly supplied by water from the lake (Vengeron station). You are therefore asked to reduce water consumption to the minimum during the above period.

#### 2. Electricity supply

From : Monday 12 June - 7 a.m.

to : Tuesday 13 June - 6 p.m.

the 130 kV VERBOIS-CERN will be disconnected to allow maintenance work to be carried out by the Services Industriels. Power will be available on the Meyrin site only for the basic installations whose operation is essential. An SB notice of cut-off will detail the arrangements to be made.

The attention of all users is drawn to the above. For further information, apply to :

J. GOLLIET - Tel. 3146

R. RAZUREL - Tel. 2177 - 2201

#### 3. Important note

These two operations have been scheduled by the Services Industriels to coincide with one of the periods when experiments are shut down and thus minimize possible disturbance to our installations.

Unless anything unforeseen occurs, the restrictions should have no effect on our activities. Nevertheless, it is most important to follow the instructions to avoid possible incidents such as a general cutoff of our electricity supply owing to the unscheduled startup of a high-power installation.