

SEMINARS SEMINAIRES

MONDAY 29 AUGUST

PRESENTATION TECHNIQUE

de 09h00 à 16h00 - Bus de démonstration
Parking PTT (près Bât.63)

La maison AEG-TELEFUNKEN (D), représentée par ELEKTRON AG, expose de l'outillage professionnel: perceuses, perforateurs électro-mécaniques, électropneumatiques, perceuses-visseuses, taraudeuses, cisailles à tôle, grignoteuses, perceuse-polisseuse, meuleuse-rectifieuse, meuleuse d'angle; pour le travail du bois: scies circulaires, scies sauteuses, défonceuses, rabots, ponceuses.

Langues : allemand, français

Renseignements : M. Diraison / FI / 4585.

ISR SEMINAR

at 14.30 hrs - ISR Auditorium
(Top floor of Building 60)

"Synchrotron radiation from undulators"

by A. Hofmann / CERN

Abstract : The synchrotron radiation from an undulator (wiggler magnet with many periods) is quasi-monochromatic. Such a magnet placed in an electron storage ring can represent an intense, well collimated and tunable source of polarized radiation in the optical, UV or X-ray region. The possibility of obtaining coherent radiation at longer wave lengths is also discussed.

WEDNESDAY 31 AUGUST

THEORETICAL SEMINAR

at 14.00 hrs - Theory Conference Room

"Gravitation as a gauge and the role of hadrons"

by Y. Ne'eman / CERN

Abstract :

I- We review the derivation of gravitation as a gauge theory of the Poincaré group, including the fiber bundle formulation. We discuss the differences between symmetries, gauge transformations and general co-ordinate transformations (GCT). A no-go theorem derived from the Ogievetsky theorem, and the rôle of $GL(4R)$ and the conformal symmetry are discussed.

II- We prove the existence of infinite-dimensional spinor representations of $SL(n,R)$, $GL(n,R)$, $GA(n,R)$ and GCT. We discuss $GA(4R)$ as an approximate symmetry of the hadrons, with the conservation of its current (the intrinsic "hypermomentum") fitting spin-independence, scaling and Regge sequences in one tensor, perhaps an "effective" description of QCD. We now gauge $GA(4R)$ and study the special rôle played by the hypermomentum in this extension of Einstein's gravity.

THURSDAY 1 SEPTEMBER

CERN PARTICLE PHYSICS SEMINAR

at 16.00 hrs - Auditorium

"Results from the DELCO experiment at SPEAR"

by J. Kirkby / SLAC, Stanford University

MONDAY 5 SEPTEMBER

ESO ASTROPHYSICS SEMINAR

at 11.30 hrs - DD Conference Room
(Bldg.13, 3rd floor)

"Recent photometry of early-type galaxies"

by S. Van den Bergh / David Dunlap
Observatory - Univ. of Toronto

BEBC USERS' GROUP

at 13.45 hrs - Council Chamber

Agenda for the sixth meeting :

1. Progress reports :
SPSC, SPS, BEBC, New facilities around BEBC
2. Neutrino shielding
3. Status and results from WA24
4. Status of WA17
5. Measuring and reconstruction on BEBC pictures.

CERN NUCLEAR PHYSICS SEMINAR

at 16.00 hrs - Theory Conference Room

"Very high magnetic fields in atomic nuclei and the possibility of finding long-lived hypernuclei"

by V.A. Karnaukhov / JINR

TUESDAY 6, WEDNESDAY 7 SEPTEMBER

SPS EXPERIMENTS COMMITTEE

Open Session on Tuesday 6 September

at 9.00 hrs - Auditorium

1. Report on SPS operations (M. Crowley-Milling).
2. Physics of the NA3 experiment ; request for beam and computer time for 1978 (W. Kienzle; SPSC 77-57/M 83).
3. A project of improving the Omega particle detector system (W. Beusch; SPSC/77-70/T 17).
4. Search for narrow boson resonances coupled to the nucleon-antinucleon system (Bari-Bonn-CERN-Glasgow-Liverpool-Milano collaboration; L. Mandelli; SPSC/77-76/P 89).
5. Study of spin effects from 10-400 GeV using a polarized atomic jet target (CERN-Lausanne-Lund-Rockefeller University collaboration; G. Von Dardel; SPSC/77-71/P 88).
6. Study of spin effects at SPS energies using a polarized proton beam (Annecy-CERN-Kyoto Sangyo-Marseille-Serpukhov-Trieste-Vienne collaboration; S. Nurushhev; SPSC/77-61/P 87).

Closed Session on Wednesday 7 September
at 9.00 hrs - Conference Room, 6th Floor
(Administration Building)

WEDNESDAY 7 SEPTEMBER

CERN NUCLEAR PHYSICS SEMINAR

at 11.00 hrs - Theory Conference Room

"Fragmentation of relativistic light nuclei:
a study of longitudinal and transverse
momentum distributions"

by L. Anderson / LBL

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

Rappel

ENSEIGNEMENT TECHNIQUE Programme 1977 - 1978

MATHEMATIQUES

- Ateliers de mathématiques

PHYSIQUE APPLIQUEE

- Classification et interactions des particules
- Les accélérateurs et leur technologie
- Technologie des systèmes hydrauliques
- Technologie des gaz

ELECTRONIQUE

- Initiation à l'électronique (1ère année)
- Travaux pratiques d'électronique
- Systèmes non-linéaires et échantillonnés
- Fonctions logiques complexes
- Systèmes logiques programmés
- Circuits à sécurité intrinsèque
- Introduction à la fiabilité des composants

INFORMATIQUE

- Techniques de programmation en FORTRAN (2ème année)
- Introduction to computers
- Programmation en BASIC
- Programming in BASIC
- Introduction aux microprocesseurs
- Introduction to microprocessors
- Techniques de programmation des mini-ordinateurs
- Informatique de gestion (2ème année)

MECANIQUE

- Initiation aux techniques d'atelier
- Electro-mécanique
- Mesures par jauges de contraintes

ADMINISTRATION

- Procédures administratives et financières
- Eléments de statistique administrative
- Organisation des travaux administratifs.

La brochure contenant la description détaillée des cours, les durées et horaires ainsi que la procédure d'inscription peut être obtenue en retournant la carte verte qui a été distribuée

à tout le personnel ou, à défaut, en renvoyant le coupon ci-dessous.

Au : Secrétariat de l'Enseignement Technique

De :

Division :

Je désire recevoir le Programme 1977-1978.

Délai d'inscription : 29 août 1977 au plus tard.

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

EP DIVISION SAFETY

As from the end of August, there will be an EP Safety Office in building 4, Room 1-043, attended between 10 and 12 every day. Calls will be received on Ext.3330 outside the hours of attendance.

IMMATRICULATION DES ETUDIANTS ETRANGERS A L'UNIVERSITE DE GENEVE

A la suite d'un entretien avec les autorités universitaires de Genève, nous sommes en mesure de donner les renseignements suivants :

- le visa du Contrôle de l'Habitant n'est pas nécessaire pour les étudiants détenteurs d'un document de légitimation délivré par le Département Politique Fédéral (carte de légitimation - attestation de fonctions);
- en ce qui concerne la preuve de l'affiliation à une caisse d'assurance-maladie, la "carte d'assurance" délivrée par "AUSTRIA" est acceptée par les autorités universitaires.

ENROLMENT OF FOREIGN STUDENTS AT GENEVA UNIVERSITY

A discussion with the Geneva University authorities has yielded the following information :

- certification by the "Contrôle de l'Habitant" is not required for students holding an identity document issued by the Federal Political Department (identity card or "attestation de fonctions");
- the Insurance Card issued by "AUSTRIA" is accepted by the University authorities as proof of membership of a health insurance scheme.

J.F. Barthélemy :
Personnel Division - Tel.2855

CERN COURIER

JULY/AUGUST EDITION 1977

Main articles in this month's packed edition cover the discovery of Upsilon, the Budapest Particle Physics Conference and the Serpukhov Accelerator Conference.

Copies available at :

- Divisional Secretariats,
 - Publications Section,
 - Central and SPS Libraries
- from

FRIDAY 2 SEPTEMBER