

nécessaire à leurs activités, en particulier dans les domaines où l'évolution technologique est rapide; deuxièmement, développer et accroître cette compétence pour permettre au CERN de répondre aux exigences de l'avenir.

La présente circulaire doit être comprise comme un encouragement pour les supérieurs hiérarchiques à consulter et conseiller leur personnel sur leurs besoins et leurs possibilités en matière de formation et de perfectionnement, en tenant compte de leurs activités présentes ou des nouvelles responsabilités qu'il serait déjà prévu de leur confier, et comme un encouragement pour les membres du personnel à étudier leurs propres besoins en formation et en perfectionnement et à en discuter avec leurs supérieurs. Ces mesures devraient aider toutes les personnes concernées à trouver les meilleurs arrangements dans chaque cas, et la circulaire expose plus en détail les conditions dans lesquelles le CERN accordera une assistance, sous la forme de temps libre et/ou de soutien financier, aux projets de formation qui auront été approuvés.

La situation sera réétudiée dans un an, lorsque nous aurons acquis plus d'expérience de la manière dont ces conditions seront appliquées, mais je suis convaincu que les efforts qui seront faits auront un effet bénéfique aussi bien pour les membres du personnel que pour l'Organisation.

Herwig Schopper
Directeur général

develop and increase this competence thus enabling CERN to meet the challenging needs of the future.

The present circular should be understood as an encouragement to supervisors to consult and advise their staff on their training needs and possibilities, taking into account their present activities or any new responsibilities already foreseen; and to members of the staff to consider their own training needs and to discuss them with their supervisors. This should help all concerned to find the best arrangements in each individual case, and the circular explains in more detail the conditions under which CERN will give assistance in the form of time and/or of financial support to training projects which are agreed.

The situation will be reviewed after a year when we have had more experience of the way in which these conditions are applied, but I am sure that the efforts made will have a beneficial effect both for the members of the personnel and also for the Organization.

Herwig Schopper
Director-General

SEMINARS SEMINAIRES

Monday 7 June

ISR SEMINAR

at 14.30 hrs - ISR Auditorium
(Top floor of Building 30)

Computer terminals at CERN
by C.E. Vandoni / DD

Traditional computer access methods (paper tape, punched cards) are being abandoned at CERN and are being superseded by terminal access. The talk will concentrate on the different types of terminals in use at CERN, the different technologies used, and the typical application fields. The present standards will be presented, along with trends for future terminals with local intelligence. The main switching system (INDEX) will also be described.

EP SEMINAR

at 17.00 hrs - Auditorium
New ways to 'look' at gaseous detectors
by G. Charpak / CERN

Recent progress in the art of gas fillings and in wave length shifters permit, in a practical

way, to retrieve the information from flashes of visible photons produced in electron avalanches. A noticeable gain in position and time resolution of gaseous detectors is obtained, with obvious applications for high resolution vertex detectors, high counting rates, cluster counting, etc...

Mardi 8 Juin

PRESENTATION TECHNIQUE

09h00/12h00 - 13h30/16h00

Bâtiment 17, Salle 1-007

Modulator SA (CH), représentant Thomson-Efcis (F) propose en démonstration THEMIS : outil de développement logiciel et ses possibilités d'applications particulières - bac d'extension EXORCISER, extension graphique - moniteur de visualisation, etc. + composants : cartes format EUROPE, micro-processeurs et mémoires.

Langue : français.

Renseignements : M. Diraison / FI / 4585.

Mardi 8 Juin

PRESENTATION TECHNIQUE

14h00/17h00 - Bâtiment 73, Salle 2-0027

Six firmes suédoises au CERN :

Contraves Svenska AB : fabrication et sous-traitance d'appareils électroniques complets, d'unités purement mécaniques;

Skoglunds Fabrika AB : emboutissage, découpage, soudage, traitement de surface, perçage, filetage, décapage ainsi que conception et fabrication des outils;

Elmakrets AB : fabrique des cartes de circuits imprimés et des circuits imprimés prêts à l'emploi;

Egil : le groupe électronique à Lund (15 entreprises autonomes) : recherche, développement et production sur mesure à la fois matériels et logiciels, interfaces d'ordinateurs, microprocesseurs sur mesure, communication numérique, CAO/FAO, logistique informatisée...;

Orebro Kabel AB : fils et câbles isolés, câbles industriels, câbles électroniques, fils à guiper sans soudure, câbles coaxiaux, câbles en spirales, prototypes;

Hebo Verken : auxiliaires de câblages, échelles et chemins de câbles, armature barres bus.

Langues : Anglais, français.

Renseignements : M. Diraison / FI / 4585.

CERN COLLOQUIUM

at 16.30 hrs - Auditorium *

Synergetics - a mathematical approach to self-organizing systems

by H. Haken / Stuttgart University

Synergetics deals with systems composed of many subsystems which can produce spatial, temporal, or functional structures on macroscopic scales by means of self-organization. We present examples of physical, chemical and biological systems which far from thermal equilibrium, can produce disorder-order or order-order transition which are often strongly reminiscent of phase transitions. We explain the basic concepts (such as order parameters, slaving principle, critical fluctuations) and mathematical approaches which allow us to predict the evolving regular or chaotic, spatial or temporal patterns. The interplay between nonlinearity and stochasticity is studied in detail.

* Note : Tea and coffee at 16.00 hrs.

Mercredi 9 Juin

PRESENTATION TECHNIQUE

09h30 - Bâtiment 13, Salle 2-005

Lugand SA (F), propose une conférence sur le collage structural avec les produits Loctite : anaérobies, cyanoacrylates, acryliques graisses (multibond), époxydes.

Langue : Français

Renseignements : M. Diraison / FI / 4585.

Wednesday 9 and Thursday 10 June

LEP MACHINE ADVISORY COMMITTEE

OPEN SESSION - Wednesday 9 June

ISR Auditorium (top floor of Bldg. 30)

14.00 hrs : Beam diagnostics, by A. Hofmann

14.45 hrs : Recent experience with superconducting cavities in PETRA and CESR, by W. Bauer and M. Tigner

15.30 hrs : LEP lattice and optics, by E. Keil

16.15 hrs : Beam dynamics considerations associated with the number of experimental areas, by S. Myers.

CLOSED SESSION - Thursday 10 June at 14.00 hrs
DG 6th floor Conf. Room, Main Bldg.

Wednesday 9 June

THEORETICAL SEMINAR

14.00 hrs - Theory Conference Room

Structure of quarks and leptons

by I. Bars / Yale Univ. and CERN

Preon dynamics constrained by a set of stringent theoretical and phenomenological requirements is discussed. Explicit models consistent with these constraints are given in which an explanation of the family patterns is related to precolour anomaly cancellation. Low energy rare processes are suppressed via preflavour symmetries. In particular strangeness changing $\Delta_S = 2(K^0 - \bar{K}^0)$ and charm changing $\Delta_C = 2(D^0 - \bar{D}^0)$ processes are forbidden in the symmetric limit of certain models. Limits of the precolour scale Δ_p are given and related to precision experiments. Other predictions and limitations are indicated.

PRESENTATION TECHNIQUE

15h00 - Bus exposition, Parking Bât. 864 (Amphithéâtre SPS)

Martin & Lunel SA (F), représenté par SARL Sofanec (F), propose une réunion d'information (projection audiovisuelle) sur le matériel pour atmosphère explosible : antidéflagrant, sécurité "E" en particulier.

Langue : Français

Renseignements : M. Diraison / FI / 4585.

DD SEMINAR

16.00 hrs - DD Auditorium
(Building 31, 3rd floor)

PILS : A Portable Interactive Language System

by R.D. Russell / DD

The presentation will discuss the following aspects of PILS :

- 1) *The command interface seen by the user.*
- 2) *The programming language, including sample programs.*
- 3) *The structure of the implementation and some details about the internal data structures and algorithms.*

- 4) The techniques used to gain portability, the obstacles encountered, the benefits and the costs of portability.
- 5) The PILS-Host Interface (PHI).
- 6) A simple method used to generate versions of PILS for different hosts from a single reference source.
- 7) Current status and future plans.

CERN PARTICLE PHYSICS SEMINAR

16.30.hrs - Auditorium *

Recent results from PEP

by J. Dorfan / SLAC

The results will include from the Mark II : their final analysis on R , S^0/dx and scale breaking; D^{*+} production in the range $0.2 < z < 1.0$ and a measurement of the charm fragmentation dn/dz ; Energy-energy correlations and a measurement of α_s ; τ production-decay multiplicities and $\sigma_{\tau\tau}/\sigma_{QED}$; limits on the production of point-like charged, spin 0 particles (i.e., Higgs or technipions) ; a test of QED at high Q^2 viz $e^+e^- \rightarrow \gamma\gamma$; and a summary of the coupling constants of leptons to the Z^0 (e , μ & τ). From MAC I will have a measurement of the τ lifetime, inclusive muons, the μ pair asymmetry and possibly their measurement of R .

* Note : Tea and coffee at 16.00 hrs.

Jeudi 10 Juin

PRESENTATION TECHNIQUE

09h30/16h30 - Bâtiment 864, Salle 2-A05

Gould Instruments SAF (F) propose en démonstration : les enregistreurs graphiques ES 1000, 8000, 2000, XY 3050, TA 600, 6500, - le conditionneur 4600 (USA-F) - les oscilloscopes à mémoire numérique 3600, 4020, 4040, 4200 (UK).

Langue : Français.

Renseignements : M. Diraison / FI / 4585.

DD COLLOQUIUM

14.00 hrs - Council Chamber

Series on Office Automation and Person-Oriented computing : Hewlett-Packard - Electronic Mail in the Interactive Office

by Martin Ockle

HP Mail is Hewlett Packard's most recent addition to its Interactive Office Systems. Based on the HP 3000 Business Computer, it is an electronic mail system designed to improve communication throughout an organization. Among the possibilities of the system are the exchange of messages, documents with other remote or local users, the filling and retrieval of such documents. Users access HP Mail through a CRT terminal which provides them with the electronic equivalent of the actual desk. HP Mail may be said to combine the advantages of both telephone and memorandum communications. The presentation will also review other HP office productivity tools for text processing, decision support graphics and report writing.

CERN COLLOQUIUM

at 16.30 hrs - Auditorium *

On the spectral gaps for almost periodic potentials

by J. Moser / ETH Zurich

While it is well known that the spectrum of the one-dimensional Schrödinger operator with periodic potential has band structure, little is known about the spectrum for almost periodic potentials. We describe a theory based on a 'rotation number' which is a function related to the spectral density. It turns out that under rather general conditions part of the spectrum is a Cantor set. Moreover, there is a surprising connection between the density of states and the Korteweg de Vries equation.

* Note : Tea and coffee at 16.00 hrs.

Friday 11 June

ECFA MEETING

at 09.30 hrs - Council Chamber

1. Approval of the Draft Minutes of the Thirtieth Plenary ECFA Meeting
2. Adoption of the Agenda
3. Chairman's Report
4. Particle Physics Research in Spain and the Re-entry of Spain to the CERN Organization (Dr. P. Pascual - Barcelona)
5. Summary of non-European Plans for Future Accelerators (Dr. R. Taylor - SLAC and DESY)
6. Next Steps on HERA (Prof. V. Soergel - DESY)
7. The LEP Project and CERN Programme and Budget (Prof. H. Schopper - CERN)
8. Proposal for a New ECFA Survey of Resources for High Energy Physics (Chairman)
9. Membership of Plenary ECFA (Chairman)
10. Any Other Business
11. Date of Next Meeting.

PRESENTATION TECHNIQUE

09h30/16h30 - Bus, parking PTT, Bât. 63

Matkemi AG (CH) propose en exposition-démonstration : ASM (F), vannes, débitmètres massiques, rotamètres; Gachot (F), vannes, robinets, motorisation, pneumatiques; Bernard (F), motorisations électriques tout ou rien ou de régulation; Guichon (F), vannes, robinets en matières exotiques; Hoke (USA), vannes miniatures et raccords; Gyroluk - Tescom (USA), manodétendeurs, monomètres et mélangeurs de gaz; Sarazin (F), soupapes de sécurité; Marston (UK), disques de rupture; Pyromeca (F), vannes pyrotechniques; Gendrot (F), encodeur universel, matériel de laboratoire, pompes doseuses FMI.

Langue : Français.

Renseignements : M. Diraison / FI / 4585.

Monday 14 June

EXCEPTIONAL EF SEMINAR

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

High Z Scintillator with Exceptionally
Short Resolution Time

by R. Allemand
M. Laval
J. Vacher

In the course of a development concerning new positron cameras, which require a coincidence between photons of 0.5 MeV, physicists in L.E.T.I. have developed Barium fluoride scintillators permitting resolution times of 120 ps (FWHM). This is being done by exploiting a fast U.V. component emitted by these crystals. The resolution time, the high density and the high Z of these scintillators make them attractive for many applications in high energy physics. The problem of adaptation of the new scintillators to photomultiplications and time pick off system will also be described.

EP SEMINAR

at 17.00 hrs - Auditorium

Charm production in 400 GeV proton-emulsion
interaction

by S.N. Ganguli / Tata Inst., Bombay

Wednesday 16 June

LEP PROJECT COMMITTEE

at 14.30 hrs - ISR Auditorium
(Building 30, 7th floor)

Electrical Power Distribution in LEP

by O. Bayard

TRAINING AND EDUCATION ENSEIGNEMENT

ACADEMIC TRAINING (Tel. 2844)

June 7, 8, 9, 10, 11

11h00/12h00 - Auditorium

Dynamics of non-fluctuating systems

by H. Haken / Univ. of Stuttgart

For abstract, see last week's Bulletin and notices.)

FORMATION DE CADRES PAR COURS DU SOIR A GENEVE

Le Centre de Perfectionnement des Cadres de Genève (CPCG) est une association sans but lucratif, créée en 1961, offrant une formation de cadre par cours du soir (environ 20 séances par an). Le cours complet dure 3 ans.

Vous trouverez ci-dessous un extrait des
sujets traités :

- Initiation au travail en groupe
- Comment aborder un problème
- Synthèse et rapport
- Initiation à l'économie
- Problèmes économiques actuels
- L'entreprise et la recherche
- L'entreprise et les collectivités
- Potentiel technologique
- Potentiel humain
- Analyse des résultats
- Choix des investissements
- Planification financière
- Le contrôle de gestion
- Aspects légaux de l'emploi
- La démarche de la décision
- Organisation et délégation
- La création d'entreprise.

Les Services d'Education et de Formation du CERN ont reçu des brochures d'information ainsi que des feuilles d'inscription. Si vous êtes intéressés, téléphonez-nous ou adressez-vous directement au Secrétariat permanent du CPCG, rue des Terreaux-du-Temple 4, tél. 32.09.40.

Nous rappelons à cette occasion que les Services d'Education et de Formation reçoivent de nombreuses brochures annonçant des cours ou séminaires à l'extérieur du CERN. Ces brochures sont à votre disposition et nous sommes prêts à vous donner toute information supplémentaire.

E. Fischer	5811	} Formation technique, administrative, à la gestion, développement des capacités personnelles
J. Huguenin	3346	
H. Alley	2460	

E. Roebuck	4005	Formations linguistiques.
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