

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

EXECUTIVE BOARD SUMMARY

At the Eightieth Meeting of the Executive Board held on 3 September 1981, the Director-General first presented a survey of a number of aspects of the LEP Project and gave details of a number of measures to provide more information about it both inside CERN and to the local population. He then briefly summarized the presentation he planned to make to the Scientific Policy Committee and to the Finance Committee concerning the Scientific Activities and Budget Estimates for the five-year period 1982-1986 in view of the request made by the Committee of Council in June 1981 that the Management should indicate the consequences on the programme of the Organization if a budget level of 617 MSF was assumed instead of the level of 629 MSF requested by the Management.

The Director-General, the Director of Administration and the Technical Director outlined preliminary ideas for a number of changes in Divisional Organization. The Director-General recalled that his proposed new structure approved by Council in June 1980 had a number of question marks, particularly on administrative matters. In addition he said that he believed it was necessary to adopt a structure which would enable LEP to be built in the most efficient way possible. The members of the Board made a number of comments and suggestions; it was agreed to continue the discussion at the next meeting.

Lastly, the Executive Board approved revised proposals for the construction of a new CERN Hostel on a site near to the Main Building.

SEMINARS **SEMINAIRES**

Lundi 21 Septembre

CONFERENCE D'INFORMATION SUR LE LEP

à 11h00 - Amphithéâtre
(Retransmission en direct par TV dans
la Salle du Conseil et les Amphithéâtres
ISR et SPS)

"Situation actuelle des sondages et
des études hydrogéologiques"

par H. Laporte / CERN
et A. Montjoie / Université de Liège

*Les sondages mécaniques en cours sur le tracé
de l'anneau du LEP et les études hydrogéologiques
sont des éléments importants de l'étude générale
du Site. L'état d'avancement de ces prospections,
les résultats obtenus à ce jour et les développements
ultérieurs prévus seront exposés en
détail.*

Tuesday 22 September

PS AND SC COMMITTEE

OPEN SESSION

at 09.00 hrs - Council Chamber

1. Status Reports

BULLETIN CERN

39/81-21.9.81

- PS 163 Search for narrow baryonium states near the $\bar{p}p$ threshold (Heidelberg-Saclay-Strasbourg; T. Walcher).
- PS 166 Search for Σ hypernuclear states using the strangeness exchange reactions (K^- , π^-) and (K^- , π^+) (Heidelberg (MPI + Univ.)-Saclay (CERN); CERN/PSCC/81-71/M94; W. Brückner).

2. New Proposal

Study of threshold production of $\bar{p}p \rightarrow \bar{\gamma}\gamma$ at LEAR (CERN-Erlangen-Freiburg-Los Alamos-Pittsburgh-Saclay-Uppsala; CERN/PSCC/81-69/P49; 81-70/S49; K. Kilian).

Experiment to measure the $\bar{p}$ production from interactions in C, Cu and W targets at 26 GeV (CERN-Los Alamos-TRIUMF; CERN/PSCC/81-67/P50; 81-73/S50; C. Johnson).

- 3. Discussion on the economy issues - see excerpt from the 27 July 1981 Research Board Minutes.

CLOSED SESSION

at 14.30 hrs - Sixth Floor Conference Room.

Tuesday 22 September

CERN COLLOQUIUM

à 16h30 - Amphithéâtre *)

"Machines commandées par la parole et entropies (degrés de désordre)"

par J. Dreyfus-Graf / Ingénieur EPEZ,
Conseiller Scientifique

Alors que les synthétiseurs de parole se trouvent déjà en pleine expansion industrielle (Speak and Spell, etc.), les reconnaissances de parole n'ont guère dépassé un stade embryonnaire. En effet, la modélisation du récepteur de parole (oreille et cerveau) est beaucoup plus complexe que celle de l'émetteur de parole (générateur et conduit vocal). Le présent exposé résume plusieurs aspects de la reconnaissance de parole.

*) Note : Les personnes qui désirent suivre ce colloque sont cordialement invitées à la Salle des Pas Perdus (face à la Salle du Conseil) à 16h00 pour rencontrer et discuter avec l'orateur. Thé et café seront servis.

Wednesday 23 September

THEORETICAL SEMINAR

at 14.00 hrs - Theory Conference Room

"Poincaré Gauge Field Theory and Gravitation"

by W. Drechsler / MPI Munich

A gauge theory of gravitation based on a Riemann-Cartan space-time U_4 will be presented. In addition to Einstein's equations describing the classical long-range gravitational field a further differential source equation coupling a matter current to the torsion tensor is introduced in this context. The relation of this current to quantum mechanical wave function description of matter based on the Poincaré group as a gauge group will be formulated using an old idea of Lurcat.

DD SEMINAR

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

"Fitting Tracks in Wire Chambers using the Chebyshev Norm instead of Least Squares"

by F. James / CERN-DD

The traditional method of fitting particle trajectories to position measurements is that of least squares. This method is certainly justified for detectors such as bubble chambers for which measurements of points on tracks are approximately Gaussian-distributed and independent. The same method is however also used for quite different detectors such as multi-wire proportional chambers (MWPC) in which position measurements are neither Gaussian nor independent. The resulting difficulties in obtaining correct parameter errors and chi-square distributions have long been recognised. We present here a quite different approach to the fitting of tracks in detectors such as MWPC which are 'quantized', using the Chebyshev (or minimax) norm instead of least

squares. Results on simulated tracks will be presented showing several distinct advantages of the new method.

Jeudi 24 Septembre

PRÉSENTATION TECHNIQUE

de 9h00 à 16h45 - Bâtiment 13
(Salle 2-005)

OMNI RAY (CH) propose deux exposés :
09h00/10h15 et 14h00/15h15 : Circuits hybrides à couche épaisse et mince (exécution standard ou à la demande même pour de petites quantités) par NEOHM (I), qui par ailleurs fabrique aussi des réseaux de résistances, des résistances, des potentiomètres;
10h30/11h45 et 15h30/16h45 : Commandes programmables, ensembles de programmation et éléments de commande électronique par KUHNKE (D).

Langue : Français

Renseignements : M. Diraison / FI / 4585.

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs - Auditorium *)

"Dimuons produced in Hadron-Hadron Collisions"

by A. Micheleni / CERN

Rapporteur talk at the Lisbon conference. New results presented at the conference include contributions on A-dependence (NA10, NA3); detailed θ - ϕ angular distributions and higher twist (NA3); QCD interpretation of high p_{ts} .

*) 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.

Friday 25 September

168/E MEETING

at 14.30 hrs - Council Chamber

"Review of the Present Status of the 168/E and Forthcoming Developments"

It is also intended to use this meeting as a means of defining the support and collaboration that can be expected from CERN by groups that wish to use 168/Es for either on-line or off-line applications in their experiments.

The preliminary agenda for the meeting is :

1. Introduction
2. Present status and future developments.
3. CERN pilot projects.
4. Situation in other laboratories : DESY, Saclay
5. Policy discussion.

ISR SEMINAR

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

"Simulation of Bunch Lengthening"

by T. Weiland / DESY

- a) *Technique*
- b) *Results from PETRA and comparison with experiments*
- c) *Predictions for LEP.*

Monday 28 September

EP SEMINAR

at 17.00 hrs - Auditorium

"Alpha-Alpha and Alpha-Proton Interactions in the CERN ISR"

by M.A. Faessler / Max-Planck-Institut für Kernphysik, Heidelberg

Tuesday 29 September

CERN COLLOQUIUM

at 16.30 hrs - Auditorium

"The Geodynamical Significance of Earth Tides"

by P. Melchior / Observatoire Royal de Belgique

Wednesday 30 September

CERN ENERGY SEMINAR - TECHNICAL TALK

at 16.30 hrs - Theory Conference Room

"Breeder Reactor Safety - how can non-experts contribute to technology assessment?"

by J. Benecke / MPI für Physik und Astrophysik, München

Thursday 1 October

DISCUSSION MEETING

at 14.00 hrs - ISR Auditorium

" $\bar{p}p$ Collisions in the ISR"

The purpose of this meeting is to review and discuss present information about $\bar{p}p$ interactions in the ISR, following the first physics runs last Spring. Introductory talks will be given by :

- D. Favart (R211) : *Total Cross-Section and Small Angle Elastic Scattering*
- S. Patricelli (R210) : *Total Cross-Section*
- B. Crawley (R420) : *Elastic Scattering at the Split Field Magnet*
- A.R. Weidberg (R703T) : *Results from the Streamer Chamber*
- T. Akesson (R807) : *Central Hadron Production*
- J. Zweizig (R608) : *Forward Production.*

CERN ENERGY SEMINAR - GENERAL TALK

at 16.30 hrs - Auditorium

"Questions about Nuclear Fusion"

by J. Benecke / MPI für Physik und Astrophysik, München

The CERN PARTICLE PHYSICS SEMINAR given by L.B. OKUN (scheduled to take place on Wednesday 16 September as announced in last week's Bulletin, No.38/81) is postponed to Thursday 29 October. Further details will be given nearer the time of the seminar.

TRAINING AND EDUCATION ENSEIGNEMENT

INFORMATION SUR DES SEMINAIRES TECHNIQUES A L'EXTERIEUR DU CERN

Les Services d'Education et de Formation reçoivent régulièrement des brochures et dépliants sur des activités de formation dans les pays membres, qui peuvent être consultés par toute personne intéressée.

Voilà deux exemples de séminaires techniques qui auront lieu à Grenoble :

- 1) Journées d'étude sur la gravure sèche en microélectronique
24-26 novembre 1981 (3 jours)
Centre d'Etudes Nucléaires, GRENOBLE
(Organisés par la Société Française du Vide)
- 2) Initiation aux méthodes et techniques de la conception assistée par ordinateur
(Stage de perfectionnement pour ingénieurs et cadres)
8-12 mars 1982 (5 jours)
Institut National Polytechnique, GRENOBLE.

Des informations supplémentaires peuvent être obtenues auprès de E. Fischer, tél. 5811, J. Huguenin, tél. 3364, et H. Alleyne, tél. 2460.

COURS DE SPECIALISATION EN STATISTIQUE ECOLE POLYTECHNIQUE DE LAUSANNE

Les méthodes et modèles statistiques orientés vers les applications dans les domaines de la géophysique et des sciences de l'ingénieur (4e session)

OBJECTIF : Ce cours s'adresse aux ingénieurs engagés dans la pratique, la recherche et le développement et qui désirent se perfectionner dans les méthodes et les techniques du traitement statistique des grandeurs aléatoires.

PROGRAMME GENERAL :

1. Analyse multivariée discrète (analyse de modèles pour les dénombrements multivariés)
2. Séries temporelles (Box-Jenkins et autres modèles)
3. Analyse factorielle (développements récents)
4. Cluster Analysis (un survol).

ENSEIGNANT : Prof. H.L. Seal, Département de Mathématiques de l'EPFL, anciennement chargé de cours aux Départements de biologie et de statistique de l'Université de Yale (USA).
Le cours sera donné en anglais.