

COMMUNICATIONS **OFFICIELLES**

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OFFICIAL NEWS

Members of the personnel shall be deemed to have taken note of the news under this heading. Reproduction of all or part of this information by persons or institutions external to the Organization requires the prior approval of the CERN management.

PENSIONS BOARD

At its 35th meeting, held jointly with the Investment Committee, the Pensions Board reviewed the 1986 results of investments in real estate, stocks and shares and the like, as presented by those responsible. It then approved the policy proposed by the Committee on the investment mix for 1987. It also approved the draft terms of reference of the Fund's new investments manager.

The Board gave preliminary consideration to the draft Annual Report for the financial year 1986. An amended, finalized version of the Report will be submitted for final approval to the Board at its next meeting.

A preliminary study of the implementation procedures of the Fourth Step of complementary pensions for staff in post was considered and approved in outline. The Fund's Administration intends to send letters to all members of the Fund by 1 July informing them of their individual position with respect to the Fourth Step benefits. In addition, a summary of the Fund's new Rules and Regulations is being prepared; it will include some examples of how the new measures apply to make them easier to understand. (The Rules and Regulations are in the process of being printed and, like

the summary, will be sent out to members and beneficiaries of the Fund by the summer.)

The Board's Vice-Chairman reported on the CCEC meeting devoted to reduction factors, the principle of which the Council has approved and which will be applicable to new recruits.

Following the re-examination of the case of a beneficiary receiving ex-gratia benefits, the Board agreed to modify the amount of the benefit as a result of the introduction of the Fourth Step.

The Board took note of the results of the 1987 elections to the Board (these results were officially announced in Weekly Bulletin No 14/87).

The Administrator mentioned that a meeting between the Chairman of the Pensions Board and the Chairman of the newly created Former CERN Staff Committee had been held with a view to co-ordinating activities.

He also regretfully announced the deaths of two beneficiaries, Mr Louis Alliod and Mr Ramon Paredes.

Vous trouverez la version française de ce texte dans le Bulletin no 15, publié la semaine dernière.

SEMINARS **SEMINAIRES**

LATE ANNOUNCEMENT!

Friday 10 April

PRESENTATION

at 14.00 hrs – DD Auditorium
bldg 31, 3-005

Recent IBM PC announcements

by D. BURKHARD / IBM Suisse, Geneva

IBM have recently announced their new product line, Personal System / 2. The presentation covers the following new items : system units, displays, options, optical disks, printers, DOS 3.3, OS/2.

Monday 13 April

EP SEMINAR

at 16.30 hrs – Auditorium

A search for heavy neutrinos in pion decays

by Beat JOST / CERN-EP

We have stopped positive pions in a high-purity germanium detector and analyzed the energy of their decay muons. The energy spectrum obtained was searched for additional lines whose existence would be an indication for neutrino mixing. Results will be presented.

Tuesday 14 April

SPS SEMINAR

at 11.00 hrs – SPS Auditorium
Prévessin

Report on the 1987 Particle Accelerator Conference in Washington

by J. BOSSER, J. GAREYTE, V. HATTON

Facts and impressions of the 1987 Particle Accelerator Conference in Washington will be presented with particular emphasis on machine physics and operation and on beam instrumentation. Information on the present status of Tevatron operation as a p-pbar collider, and on the Stanford Linear Collider (SLC) will also be given.

Tuesday 14 April

SCIENCE AND SOCIETY

at 16.30 hrs – Auditorium*

Worldwide changes of climate due to manmade increase of trace gases in atmosphere

by K. HEINLOTH / Physikalisches Institut,
Universität Bonn

Natural balance and variations of the global climate are strongly influenced by the heat absorbing trace gases CO₂ and water vapour. The natural behaviour of climate is being disturbed by men due to the increasing emission of some trace gases, the most important of which being CO₂ from burning fossil fuels. A drastic reduction of the further emission of all trace gases will be necessary. This will have strong implications e.g. on our future energy consumption.

* Tea and coffee will be provided at 16.00 hrs.

Wednesday 15 April

PS SEMINAR

at 11.00 hrs – PS Auditorium
bldg 6, 2-024

Status of the Los Alamos proton storage ring

by Eugene Colton / Los Alamos National
Laboratory

Machine experiments and measurements carried out on the PSR will be described. An average current of 30 μ A with a maximum of 3.4×10^{13} protons per pulse has been achieved so far. The present limitations are due to H⁻ source, a 'slow' accumulation loss and a fast transverse instability.

Wednesday 15 April

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Phenomenology of a Z' in electron-positron collisions

by P. FRANZINI / CERN and SLAC

Models with an extra gauge boson (Z') are discussed. Present limits on the properties of such a Z' (from requiring that the Z⁰ mass not be shifted excessively;

from neutral current experiments; and from the structure of the mass matrix following from the Higgs-boson content of particular theories) are reviewed. We then examine what extensions in sensitivity can come from electron-positron collision experiments at the Z peak, particularly cross-section and asymmetry measurements. Finally, we consider the additional information provided by asymmetry measurements in electron-positron collisions at energies above the Z.

Wednesday 22 April

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Can four-dimensional string theories resemble the standard model?

by H.P. NILLES / CERN

After a discussion of the motion of closed strings on twisted tori (orbifolds) we construct four-dimensional string theories as compactified versions of the ten-dimensional E₈ × E₈ heterotic string. This then allows us to answer questions such as whether gauge groups like SU(3) × SU(2) × U(1) and matter representations like three families of quarks and leptons can be obtained in such a framework.

Mercredi 22 avril

REUNION OUVERTE DU LEP

à 14.30 hrs – Amphithéâtre du LEP

1. Annonces
2. Vidéo – Avancement des travaux du
génie civil
3. La radioprotection autour du LEP

par M. HÖFERT et H. SCHÖNBACHER

La radioprotection autour du LEP a été conçue dans l'esprit 'ALARA' recommandé par la Commission Internationale de Protection Radiologique (CIPR). L'organisation a également pris pour principe de maintenir les expositions aux rayonnements ionisants à des niveaux aussi bas que techniquement possibles. Les risques d'irradiation par l'anneau du LEP et par des aires d'expériences seront présentés : l'exposition directe aux rayonnements secondaires, la radioactivité induite, ainsi que les composants chimiques nocifs produits par le rayonnement ionisant. Le programme de surveillance radioprotection pour les zones klystrons, les aires d'expériences et le site sera traité en considérant également l'impact radiologique du projet LEP sur l'environnement.

Wednesday 22 April

DD SEMINAR

at 15.00 hrs – DD Auditorium
bldg 31, 3-005

Please note unusual time!

Advanced visual computing : yesterday, today and tomorrow

by James H. CLARK / Silicon Graphics

Engineering and scientific computers until recently have been number-crunching machines, generating countless pages of numerical data output. Engineers and scientists now recognize the immense value of visualizing the output in highly interactive 3-D graphic form. Super-workstations are now available for 4-D visual simulation (3-D + time), and have rapidly increased the depth of scientific understanding of their users.

James H. Clark is Silicon Graphics' founder and Board Chairman. During the past 14 years he has developed hardware and software for advanced special-purpose graphics and CAD systems and holds the patent for the 'Geometry Engine'. For three years he was Associate Professor of Electrical Engineering at Stanford, where he led the VLSI research team that developed the Geometry Engine. James Clark holds a PhD in Computer Science and an MS in Physics from the University of Utah.

Friday 24 April

MEETINGS ON

PARTICLE PHYSICS PHENOMENOLOGY

at 11.00 hrs – TH Conference Room

Neutrino counting and the top mass from W and Z^0 production cross-sections at the collider

by D. DENEGRI / Saclay & UA1 Collaboration
and L. FAYARD / LAL, Orsay & UA2
Collaboration

Monday 27 April

EF SEMINAR

at 11.00 hrs – EF Conference Room
bldg 13, 2-005

News on detectors from the SLAC Conference

by Ariella CATTAI / Kerforschungsinstitut
Karlsruhe and CERN-EF

Du 4 au 7 mai & du 11 au 14 mai

SEMINAIRE EXCEL SUR MACINTOSH

- Deux semaines, du lundi au jeudi, à raison de huit demi-journées
- Les participants devront avoir les connaissances de base du logiciel EXCEL
- Nombre de places limité
- Pour tous renseignements et inscriptions, s'adresser à Mme W. HUG / EP, tél. 3367, le matin de 08.00 à 12.00 h.
- Date limite d'inscription le mercredi 15 avril 1987.

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

ACADEMIC TRAINING

Tel. 2844-3364

Academic Training Programme *3rd term*

18, 19, 20, 21 and 22 May

11.00 hrs to 12.00 hrs – LEP Auditorium
bldg 30, 7th floor

Please note change of place!

Dynamics of beam diagnostics

by A. HOFMANN / CERN-LEP

20, 21 and 22 May

11.00 hrs to 12.00 hrs – Auditorium

Dark matter and galaxy formation

by R. RUFFINI / University of Rome

3, 4 and 5 June

11.00 hrs to 12.00 hrs – Auditorium

Hot topics in spectroscopy

by F.E. CLOSE / Rutherford Appleton
Laboratory

11 and 12 June

11.00 hrs to 12.00 hrs – Auditorium

Interaction of electrons with materials and fields

by K. POTTER / CERN-TIS

16, 17, 18 and 19 June

11.00 hrs to 12.00 hrs – Auditorium

Lattice gauge theories

by G. MARTINELLI / CERN-TH and
R. PETRONZIO / Max-Planck Institute,
Munich

The abstract of the lectures, as well as any changes in the above details (dates, time, place, title, etc.) will be published in the CERN Bulletin and by Notices before each series of lectures.