

Lastly, G. Brianti gave a summary of the oral presentation he will make on Industrial Support to the October meeting of the Finance Committee. The Management Board approved the broad outline of his proposals which include the suggestion for the appointment of a Coordinator/Manager for all Industrial Support contracts.

cadre de ce système et il sera disponible dans les secrétariats de division et à l'Association du personnel à partir du 28 septembre 1988.

Pour terminer, G. Brianti a présenté un résumé de l'exposé oral qu'il fera sur l'appui industriel à la réunion d'octobre du Comité des Finances. Le Comité de management a approuvé les grandes lignes de ses propositions, parmi lesquelles figure la suggestion visant à la nomination d'un Coordinateur/Responsable pour tous les contrats d'appui industriel.

COMITE DES PENSIONS

Tous les membres et bénéficiaires de la Caisse de Pensions sont invités à

l'Assemblée générale annuelle

qui se tiendra

**à l'Amphithéâtre du CERN
le mercredi 28 septembre 1988
à 16 heures.**

L'ordre du jour sera le suivant :

1. Introduction W.C. Middelkoop
2. Rapport annuel 1987
(des exemplaires de ce rapport peuvent être obtenus auprès des secrétariats de division)
 - Principaux développements G. Ullmann
 - Investissements F. Armuzzi
 - Immobilier C.D. Forman
 - Comptes R. Hugentobler
3. Rendement réel des avoirs :
 - cotisations et déficit technique G. Maurin
 - comparaisons avec d'autres fonds W.C. Middelkoop
4. Questions des membres ou bénéficiaires*
 - * Les personnes désirant poser une question sont invitées à adresser celle-ci, dans la mesure du possible, par écrit, avant l'Assemblée, à M. G. Ullmann, Administrateur de la Caisse.
5. Conclusions

Comme l'année dernière, un verre de l'amitié sera offert aux bénéficiaires après la réunion.

PENSIONS BOARD

All members and beneficiaries of the Pension Fund are invited to attend the

Annual General Assembly

be held

**in the CERN Auditorium
on Wednesday 28 September 1988
at 16.00 hrs.**

The Agenda comprises :

1. Opening Remarks
2. Annual Report 1987
(copies are available from divisional secretariats)
 - Major developments
 - Investments
 - Real Estate
 - Accounts
3. Real Return on Assets :
 - Contributions and Technical Deficit
 - Comparisons with other Funds
4. Questions from the members or beneficiaries*.
 - * Persons who wish to ask questions are encouraged to do so, where possible, in advance, in writing, addressed to Mr G. Ullmann, Administrator of the Fund.
5. Conclusions

As last year, beneficiaries are invited to a drink after the meeting.

SEMINARS SEMINAIRES

Lundi 26 septembre

PRESENTATION TECHNIQUE

de 14.30 à 16.00 h - Amphithéâtre DD
bât. 31, 3-005

Kontron Electronic AG Datasystems (CH) propose une présentation de terminaux avec écran de visua-

*lisation, lecteurs optiques, imprimantes graphiques couleurs, écrans de visualisation haute résolution, imprimantes laser et matricielles.
Pays d'origine : D, J, N, USA.*

**14.30 Présentation de la Société H. Vetsch
Kontron**

- 14.40 **Terminaux :** Y. Cammoun
nouveauautés, types, émulations
- 14.50 **Lecteurs optiques :** Y. Cammoun
Codes à barres, OCR, scanners
- 14.55 **Périphériques graphiques :** Y. Cammoun
moniteurs, digitizers, imprimantes graphiques couleurs
- 15.10 **Imprimantes :** B. Holass
laser, ioniques, matricielles pour PC et Host
- 15.30 **Discussion**
- 16.00 **Fin de présentation**

Langue : français

Renseignements : M. Diraison / FI / 4585

Tuesday 27 September

TECHNICAL PRESENTATION

09.00 to 17.00 hrs – bldg 6, 2-004

Exhibition by LeCroy Corporation of New York and Geneva.

Exhibition of new products from their range of fast data acquisition instruments.

FASTBUS equipment include the new 64 input, 25 pS resolution, 12/15 bit TDC, and interfaces to DEC, PC and VME buses.

Chamber mounted circuits include a 16 channel AMP/DISC/TDC hybrid offering microamp sensitivity and multihit, 10 nS timing.

Waveform Digitising is shown with the new, Geneva made, 400 MS/s Digital oscilloscope and the 1.35GS/s CAMAC transient recorder.

Representatives from various product divisions will be on hand to discuss applications, measurement and data handling problems and systems or trigger set-ups.

Langages : English, French, Italian

Information : M. Diraison / FI / 4585

Tuesday 27 September

CERN COLLOQUIUM

at 16.30 hrs – Auditorium*

The Einstein-Podolsky-Rosen paradox is an experimental puzzle which promises interesting results

by O. PICCIONI / University of California, San Diego

Despite the voluminous literature published, the EPR state of two particles, such as the theoretically preferred ud-du state for fermions or the experimentally popular corresponding state for the linear polarizations of photons, is transparently described as a revised edition of the original presentation of Einstein et al, focussing on the concepts of eigenstates, of wave packets and non commutation of angular momentum components in different direc-

tions. Of these, the considerations of wave packets has been inadequately discussed in the literature. Paying enough attention to it, one concludes that the EPR states contradict quantum mechanics. The invention of actions at a distance, which would relieve the contradiction, can be seen untenable for many obvious reasons. A non obvious one is the contradiction with special relativity, a contradiction which has generally been discounted for the untenable argument that humans cannot use the present experimental set ups for communications. The beautiful example of Einstein et al which is even at present claimed to be an unquestionable proof of the existence of the EPR state, is shown not to be a viable example of EPR because even when modified after the suggestion of Epstein it does not produce the violation of QM claimed by the authors in 1935. The arguments which seem to dictate the existence of the EPR state can be shown not to be as compelling as generally held. In view of the fact that the experiments on the EPR, most of them beautifully done, appear to be in agreement with the unacceptable hypothesis of actions at a distance, one must conclude that more experimental aggressiveness, in the style of elementary particle research, is necessary. The expectation of rewarding results seem amply justified.

* Tea & coffee will be served at 16.00 hrs.

Wednesday 28 September

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

The bremsstrahlung for e^+e^- linear colliders in the TeV range

by T.T. WU / Harvard & CERN

There is no point reaching very high energies if it is not with a very high luminosity. Realistic machine parameters thus lead to a large amount of bremsstrahlung when bunches of particles cross each other. The radiation occurs in the deep quantum régime and classical formulae for synchrotron radiation no longer apply. The calculation of the radiation rate and spectrum in that régime will be presented.

Jeudi 29 septembre

PRESENTATION TECHNIQUE

de 10.00 à 12.00 h et de 14.00 à 16.00 h

bât. 17, 1-007

Alarme & Sécurité (CH), distributeur de IMMAPLY (F), présente un système d'analyse d'image (carte 'NEURONE'), pour le contrôle en processus industriel (qualité, production, sécurité, etc.), qui intègre un calculateur A.S.I.C. Le traitement de l'image est effectué en temps réel, 50 i/s, avec une précision effective toutes les trames, soit chaque 20 ms; un calcul statistique rend compte de la caractéristique visualisée.

La carte NEURONE est capable en temps réel de donner les coordonnées de l'objet en XY, de suivre son déplacement dans l'image et de donner en temps réel sa surface en tenant compte de sa position dans cette image.

Langue : français

Renseignements : M. Diraison / FI / 4585

Friday 30 September

SPS SEMINAR

at 11.00 hrs – SPS Auditorium

Data acquisition in the new SPS control environment

by Quentin KING / School of Physics,
University of Bath

Accelerator control is becoming less of a black art and more a science. Rigid computational solutions to complex problems are now feasible with the introduction of greater computing power at all levels within the SPS control system. The success of these computational solutions depends, however, on the rapid acquisition of large numbers of beam measurements, which in turn require improvements in the data acquisition method for beam monitoring devices. A prototype system for wire scanners has been developed to improve acquisition performance with the use of a new network and a new data management philosophy. The lessons learned from this project will be presented together with a discussion of the possibilities for the future.

Monday 3 October

MEETING ON FASTBUS DEVELOPMENTS

at 09.00 hrs – TH Conference Room

1. *The DELPHI first and second level trigger*
by S. Quinton / R.A.L.
2. *EVI, an interface between the ALEPH event builder and the VAX-BI*
by V. Mertens / CERN-EP
3. *XEMU : The VAX control and acquisition program of the DELPHI FASTBUS central partition*
by Ph. Gavillet / CERN-EF
4. *Timing of SI, CI and other masters in FASTBUS clusters*
by F. Bal / CERN-EP
5. *Various*
 - a) *Some aspects of FASTBUS mechanics*
 - b) *New from the US*
 - c) *A.O.B.*

Monday 3 October

EP SEMINAR

at 16.30 hrs – Auditorium

Precise determination of the real part of the forward elastic scattering amplitude for pp and $p\bar{p}$ at $\sqrt{s} = 24.3$ GeV

by R. BREEDON / The Rockefeller University

Measurements of small-angle elastic scattering may be used to test models for the energy dependence of the total cross-section. Experiment UA6 has made a high statistics determination of ρ , the ratio of the real to imaginary part of the forward elastic amplitude, as well as the nuclear shape parameter, for both pp and $p\bar{p}$ using the same apparatus. An array of silicon detectors, featuring a position sensitive detector, was used to observe protons recoiling from a hydrogen jet target. The results will be compared with models predicting different asymptotic behaviour of the total cross-section.

Wednesday 5 October

OPEN MEETING

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

CERN Data Networking Requirements in the Nineties

by B. CARPENTER / CERN-DD

Wednesday 5 October

COMPUTER SEMINAR

at 16.00 hrs – Auditorium

'EPICS' : exploring picture space

by S. JOHANNESSON & Sten KALLIN / IBM
Stockholm

Friday 7 October

PRESENTATION

at 10.00 hrs – DD Auditorium
bldg 31, 3-005

Recent OS-9 developments

by K. KEMPF / Director of R&D, Microware

EF AUTUMN SEMINARS 1988

EF Division is organizing a new series of seminars to take place this autumn.

Preliminary programme :

10 October	Design concepts and applications of a multi-purpose Fastbus master : The ALEPH Event Builder	Volker Mertens CERN-EP
17 October	The CHARM-II Detector	Wilfried Flegel CERN-EP
24 October	Scintillating fibres for particle tracking	Heinrich Leutz CERN-EF
14 November	Computing support for engineering	David Jacobs CERN-DD
21 November	Picosecond laser pulses for photocathode research	Kryno Geissler CERN-EF
28 Novembre	Report on the IEEE 1988 Nuclear Science Symposium in Florida	Tiziano Camporesi CERN-EP

Unless otherwise indicated, the seminars will take place on Mondays from 11.00 hrs to 12.00 hrs in the EF Conference Room, bldg 13, 2-005.

SEMINAIRES EF D'AUTOMNE 1988

Cet automne la division EF organise une nouvelle série de séminaires.

Programme préliminaire :

Sauf avis contraire, les séminaires auront lieu le lundi de 11.00 h à 12.00 h dans la Salle de Conférence EF, bât. 13, 2-005.

TRAINING AND EDUCATION ENSEIGNEMENT

ENSEIGNEMENT GENERAL Tél. 2844 - 5811

Jeudi 6 October

de 13.00 h à 13.30 h – Amphithéâtre
Science pour tous
par R. CARRERAS

ACADEMIC TRAINING Tel. 2844-3364

4, 5, 6 & 7 October

11.00 to 12.00 hrs – Auditorium
Accurate tests of the standard electroweak model at LEP. The case for polarized beams
by A. BLONDEL / CERN-EP

Precise tests of the Standard Electroweak Model will be performed in LEP with unprecedented accuracy. These include in particular :

- 1. Measurements of the Z and W boson masses and of their partial and total widths*
- 2. Measurement of the number of neutrinos by various methods*
- 3. Possibilities for direct observation of the Higgs Boson*
- 4. Measurements of the weak couplings of the various fermions*
- 5. Study of the W-pair production*

Polarization of the beams is essential for precise measurements of the masses and of the couplings. The prospects for polarized beams in LEP and the specific methods for polarization experiments will be described in some detail.