

la session du Conseil de décembre, soit incluse dans les propositions budgétaires qui seront présentées par la Direction au Comité des finances et au Conseil en juin. Il a été convenu que cette question pourrait être examinée conjointement avec l'application de l'indice des traitements.

Le Comité tiendra une réunion extraordinaire le 10 avril pour traiter les points de l'ordre du jour qui n'ont pas pu être abordés et la prochaine réunion ordinaire est prévue pour le 23 avril 1991.

SEMINARS SEMINAIRES

Monday 15 April

PPE SEMINAR

at 16.30 hrs – Auditorium

On the precise determination of the lineshape parameters at LEP

by M. MARTINEZ / Barcelona University

Lineshape measurements are the most accurate ones performed at LEP so far. From them, precise determination of Z parameters is possible. The smallness of the statistical errors attainable after the next year's runs obliges to consider in detail all the systematic uncertainties which could come from the experimental measurements, the machine parameter uncertainties, the fitting procedure and the theoretical approach. The actual method used to extract the Z parameters from the lineshapes will be described in detail and all the relevant uncertainties and possible biases coming from the sources mentioned above will be discussed. Finally, physics implications of the foreseen accuracies in the forthcoming measurements at LEP will be analysed.

Tuesday 16 April

TECHNICAL PRESENTATION

09.00– 12.00 hrs & 14.00–16.30 hrs
bldg 17/1-007

PI, Physik Instrumente (D), represented by Polyscience AG (CH), is a leading manufacturer in micropositioning systems like DC- or stepping motor driven linear or rotary stages. Some of their major product lines are piezoelectric systems for outstanding positioning accuracy in static and dynamic applications.

1. Motorized Micropositioning: linear posit. stages up to 300 mm travel with position repeatability of better than 1 micro - rotary posit. stages with extremely high resolution -DC- and stepping motor controllers -DC-motor controllers as a PC-compatible plug-in board -application software for positioning control.

A special meeting is to be held on 10 April to deal with the topics that were left over on the agenda, while the next regular meeting will take place on 23 April 1991.

2. Piezoelectric Micropositioning: piezoelectric translators in high- and low-voltage design -PZTs with integrated positioning sensors -Position control electronics for strain gages and LVDTs -control interfaces for static and dynamic PZT operations.

3. Fast Piezoelectric Tilting Mirror Platforms for beam steering and image correction and stabilization.

Languages: English, French and German

Information: M. Diraison / FI / 4585

Mercredi 17 avril

PRESENTATION TECHNIQUE

de 09.00 à 17.30 h – Site de Prévessin
parking bât. 867

Facom (F), spécialiste de l'outillage à main professionnel pour l'industrie et le garage, présente l'ensemble de sa gamme de produits.

Langue: français.

Renseignements: M. Diraison / FI / 4585

Wednesday 17 April

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

New rigorous results on energy levels in two-body systems with applications to atomic and particle physics

by Joachim STUBBE / University of Geneva

In 1984, Baumgartner, Grosse and Martin proved that if, in the equation, the central potential has a Laplacian with a given sign, the order of energy levels corresponding to what would be a degenerate multiplet for the Coulomb potential is known. Several recent results on bound states in such potentials will be summarized:

- inequalities on spacings of energy levels of purely angular excitations applied to muonic and alkaline atoms
- bounds on ionisation energies for alkaline atoms;
- estimates for wave functions and leptonic widths of mesons;
- fine structure splittings in muonic and alkaline atoms.

Wednesday 17 April

COMPUTING SEMINAR

at 16.00 hrs – CN Auditorium
bldg 31/3-005

Report on recent HEP conference in Japan

by H. RENSHALL / CERN-CN & J. SHIERS /
CERN-CN

The recent Computing in High Energy Physics '91 conference held in Tsukuba, Japan, covered a broad range of topics from Architectures to Data Management by way of Operating Systems, Networking, Software Engineering and User Interfaces. The conclusion of the conference summariser was that the conference reflected the real progress that has been made in the way HEP does its computing. A summary of the conference will be given by Jamie Shiers and Harry Renshall with each covering half the subject areas. They will also present their own personal conclusions. Jamies Shiers works in the Applications Software group and Harry Renshall in the Consultancy and Operations group, both in CN division.

Organizer: N. Cremel / CN

Monday 22 April

AC SEMINAR

at 11.00 hrs – AT Auditorium
bldg 30, 7th floor

High luminosity LEP

by John JOWETT / CERN-SL

The luminosity of LEP might be increased substantially if the number of bunches in each beam could be increased beyond the present 'design' value of 4. Studies of the accelerator physics and hardware aspects of such an upgrade have shown that, with the help of a 'pretzel scheme', up to 36 bunches per beam might be collided at the Z^0 energy. Less dramatic, but nevertheless useful, luminosity increases are possible at energies well beyond the threshold for W-pair production. Some of the electrostatic separators needed for a low-cost version of the pretzel scheme are being installed now with a view to allowing at least 8-bunch operation, possibly as soon as 1992.

Monday*22 April

COMPUTING SEMINAR

GISMO: OOP in HEP

by W. B. ATWOOD / SLAC
at 16.00 hrs* – CN Auditorium
bldg 31/ 3-005

The GISMO Project was born in the Summer of 1990 at CERN. Its purpose was to explore how well the paradigm of Object Oriented programming would work for 'typical HEP codes.' Initially conceived to be a generalized reconstruction program, it was found to be easily extended back into the

domain of simulation. The OOP approach naturally lends itself to modern Graphical User Interfaces and GISMO makes full use of this as implemented on NeXT computers. Today Gismo is a fully interactive program that can be used to model 'simple' detectors, reconstruct events in them, and output the results for further analysis. The benefits of the Object Oriented approach will be discussed and an online demonstration of building a detector in GISMO and running events of various types through it will be shown.

Organizers: N. Cremel/CN & M. Storr /ECP

* Please note unusual day and time

Monday 22 April

PPE SEMINAR

at 16.30 hrs – TH Conference Room*

A study of heavy flavour production using muons in hadronic Z^0 decays

by J. CHRIN / CERN & University of Manchester

The total momentum and transverse momentum of muons, in approx. 133,000 hadronic decays of the Z^0 , have been measured using the OPAL detector. Results are presented on measurements of (i) the partial widths $\Gamma(Z^0 \rightarrow \bar{b}, c\bar{c})$, (ii) the heavy quark fragmentation functions, and (iii) the forward-backward asymmetry for $Z^0 \rightarrow B\bar{B}$ decays.

* Please note unusual place

Mardi 23 avril

PRESENTATION TECHNIQUE

10.00-12.00 h & 14.00-16.00 h
bât. 73/2-027

Norgren Martonair (CH) présente une gamme d'éléments pneumatiques: vérins Martonair (D), vérins sans tige Lintra (D), pompes à vide Piab (D), unités de conditionnement d'air Norgren (GB).

Applications: automation, manipulation, traitement de l'air.
Langue: français

Renseignements: M. Diraison / FI / 4585

Tuesday 23 April

PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium

Latest results from AGS-E802 on identified charged particle production and global transverse energy flow in proton, oxygen and silicon interactions at 14.6 GeV/c per nucleon

by Michael J. TANNEBAUM / CERN &
Brookhaven National Laboratory

Wednesday 24 April
SPECIAL PS SEMINAR
at 10.30 hrs – PS Auditorium
bldg 6/2-024
Antiproton Accumulator Complex (AAC), LEAR
and experiments: Current issues – 1991
AAC : S. MAURY
LEAR : M. CHANEL
Experiments : R. LANDUA

Friday 26 April
COLLOQUIA ON EMERGING STANDARDS IN
APPLICATIONS SOFTWARE
at 14.00 hrs – CN Auditorium
bldg 31/3-005
Digital's COHESION CASE environment
by Jean-Michel DEPRAZ

Thursday 2 May & Friday 3 May
SYMPOSIUM ON QUANTUM PHYSICS
IN MEMORY OF JOHN STEWART BELL

All sessions will be held in the Auditorium

Thursday 2 May
11.00 – 11.15 *Welcome*
11.15 – 12.30 *Experimental Tests of Bell Inequalities*
A. ASPECT
12.30 – 14.00 *Lunch*
14.00 – 15.15 *Neutron Interferometry tests of Quantum Mechanics*
H. RAUCH
15.15 – 16.30 *Macroscopic Quantum Effects*
A.J. LEGGETT
16.30 – 17.00 *Coffee Break (Salle des Pas Perdus)*
17.00 – 18.15 *John Bell and the Moral Aspects of Quantum Mechanics*
K. GOTTFRIED
18.15 – 18.30 *Videos*
18.30 – 19.30 *Cocktails (Salle des Pas Perdus)*

Friday 3 May
09.30 – 10.45 *New Aspects of Bell's Theorem*
A. SHIMONY
10.45 – 11.15 *Coffee Break (Salle des Pas Perdus)*
11.15 – 12.30 *Beyond Conventional Quantum Mechanics*
G. GHIRARDI
12.30 – 14.00 *Lunch*
14.00 – 15.15 *Quantum Effects in Accelerator Physics*
J. LEINAAS
15.15 – 16.30 *The Breaking of Classical Symmetries by Quantum Mechanics*
R. JACKIW

If you are interested in attending the Symposium,
please send a note to Jeanne Rostant in the TH Division Secretariat (ROSTANT@CERNVM).

**TRAINING AND
EDUCATION
ENSEIGNEMENT**

ACADEMIC TRAINING

Tel. 2844 – 3127 p.m.

15, 16, 17 & 18 April
11.00 to 12.00 hrs – Auditorium
Polarized e-beams in LEP
Lecture on 15.4 : physics applications of polarized beams in LEP
by A. BLONDEL / CERN-SL

Lecture on 16 & 17.4 : Beam polarization for pedestrians
by J. BUON / LAL, Orsay
Lecture on 18.4 : The measurements of transverse polarization in LEP
by M. PLACIDI / CERN-SL