

Le procès-verbal de l'Assemblée générale annuelle des membres et bénéficiaires de la Caisse, qui s'est tenue le 12 septembre 1990, sera disponible dès le lundi 10 décembre dans les secrétariats de division. Les bénéficiaires de pensions pourront obtenir ce document en s'adressant directement à l'Administration de la Caisse de pensions, tél. (767)2738.

was held on 12 September 1990, will be available from 10 December at division secretariats. Pension beneficiaries can obtain this document directly from the Administration of the CERN Pension Fund, tel. (767)2738.

SEMINARS SEMINAIRES

Friday 7 December

FORTY-EIGHTH PLENARY ECFA MEETING

at 09.30 hrs – Morning Session : Auditorium &
at 14.30 hrs – Afternoon Session : Council
Chamber

- 09.30 1. *Approval of the Draft Minutes of the Forty-seventh Plenary ECFA Meeting*
2. *Approval of the Draft Agenda*
3. *Summaries of the Aachen LHC Workshop:*
09.35 *The LHC Machine and Interaction Regions (G. Brianti)*
10.30 *The LHC Physics Programme (G. Altarelli)*
Break
11.45 4. *The LHC Detectors (P. Jenni)*
Lunch
14.30 5. *Chairman's Report*
15.00 6. *Discussion of the ECFA Recommendation on LHC*
Break
16.30 7. *The Phi-Factory and S.C. Linac R&D at Frascati (E. Iarocci)*
17.15 8. *Any Other Business*
17.30 *End of Meeting*

Monday 10 December

PPE SEMINAR

at 16.30 hrs – Auditorium

$b\bar{b}$ physics with the L3 detector

by Robert CLARE / MIT

We have made a measurement of mixing in the $B^0\bar{B}^0$ system and of the $Z^0 \rightarrow b\bar{b}$ forward-backward asymmetry. The $b\bar{b}$ events have been tagged using the semileptonic decays of the b quarks. Our results are based on approximately 5.5 pb^{-1} . We have determined the mixing parameter, χ_B to be $0.178 + 0.049 - 0.040$ and the asymmetry, A_{bb} to be $0.130 + 0.044 - 0.042$. From this value of A_{bb} we determine $\sin^2\theta_w$ to be 0.225 ± 0.008 .

Mardi 11 décembre

PRESENTATION TECHNIQUE

de 09.00 à 12.00 h – bât. 6, 2-004

Encore Computer SA (USA/F)

Les produits présentés font partie d'une nouvelle gamme de calculateurs, issue de la fusion de Encore Computer Corporation et de Gould Computer System Division, et ont pour pays d'origine les Etats-Unis. La gamme ENCORE 90 est une famille de calculateurs temps réel basée sur une architecture parallèle, multiprocesseurs symétriques à mémoire partagée. Leur grand intérêt réside dans l'ouverture de ces systèmes, tant au niveau matériel que logiciel. Ces calculateurs sont architecturés autour d'une plateforme standard (processeurs Motorola 88X00), bus VME, interfaces SCSI (Small Computer System Interface), Ethernet, FDDI (Fiber Distributed Data Interface) et basés sur Unix System V. Cette architecture peut supporter plusieurs exécutifs simultanément et dispose de deux niveaux de moniteurs temps réel : Unix temps réel pour une granularité de préemption du noyau de l'ordre de 200 microsecondes et Micro MPX pour une granularité de 50 microsecondes. Ils sont principalement destinés à toute application temps réel déterministe et s'intègrent parfaitement dans des systèmes de process rapides.

Langues : français, anglais

Renseignements : M. Diraison / FI / 4585

Tuesday 11 December

TIS SEMINAR

at 11.00 hrs – PE Auditorium (Techn. Training)
bldg 593, room 11

Learning by mistakes*

Considérations sur la sécurité*

Il senno del poi*

by Franco BONAUDI / CERN-ECP

The obvious approach to risk analysis is to ask the question : 'What would happen if ... ?'. This requires a rather wide (mental) data bank of

experimental observations to draw from. Personal involvement in incidents or near misses is a first source of such data. A better source is the observation of incidents happening around oneself. Some examples of such data and observations, collected during 40 years of activity, will be presented.

* Language chosen by the speaker depending on the audience

Tuesday 11 December

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

A new determination of the direct CP violation parameter ϵ'/ϵ by the NA31 experiment

by Bernd PANZER / CERN & MAINZ

* Tea & coffee will be served at 16.00 hrs.

Wednesday 12 December

CN TECHNICAL PRESENTATION

at 10.00 hrs – AT Auditorium*

bldg 30, 7th floor

IBM RS/6000 Workstations : recent announcements

by Markus BAERTSCHI / IBM Geneva

The recent enhancements to the IBM POWERstation /6000 series of workstations will be presented:

- *A new RS/6000 Model 550, with a performance of up to 23 MFLOPS / 56 MIPS*
- *New memory cards, allowing even the smaller models to be equipped with 128 MB of memory*
- *A new release of the FORTRAN compiler, with many extensions and producing 10-30% faster code due to an imbedded optimizing pre-compiler.*

Language : English

Organizer : C. Parkman / CN

* Please note the unusual location

Wednesday 12 December

PS SEMINAR

at 11.00 – PS Auditorium

bldg 6, 2-024

The Darmstadt near infrared free-electron laser

by K. ALRUTZ-ZIEMSEN

A free electron laser (FEL) operating in the near infrared region ($\lambda = 2.5 - 5 \mu\text{m}$) is currently under construction at the superconducting electron accelerator at Darmstadt University. After a short introduction to the field of FEL physics, the machine requirements for operation of the FEL and the necessary modifications of the present configuration of the accelerator will be discussed. The design and layout as well as the status of the individual components of the FEL such as high current injection, undulator system and optical resonator will be presented.

Wednesday 12 December

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Unseen matter in spiral galaxies

by E.A. VALENTIJN / Laboratory for Space Research, Groningen & ESO, Garching

The disks of spiral galaxies have long been thought to contain only a modest amount of light-absorbing dust, which allowed the disks to be transparent to their own starlight and observers to detect even the far sides of the systems. This view was based on studies of the variation of the average surface brightness as a function of the inclination along the line of sight in rather small samples of galaxies. We have digitized the photographic images of a carefully-selected sample of 16000 galaxies and determined an extensive set of photometric parameters. These data allow a re-analysis of the effective transparency, using the actually measured surface brightness profiles for much larger, more strictly defined samples. Several tests provide new evidence that the major portions of many spiral disks are opaque and in many cases possibly only the outer crust of stars is observable. This invalidates most determinations of mass to light ratios. Various photometric properties point to an obscuring component with a larger exponential scale length than that of the stars, possibly composed of cool compact opaque clouds. This result diminishes the evidence for dark haloes around spirals, as inferred from rotation curves, and relates to the evidence for dark matter in about 80% of the galaxies in the universe – the result does not alter views on missing matter around giant elliptical galaxies or dumbbell systems (Casertano and Valentijn), or in spiral-poor clusters of galaxies.

Wednesday 12 December

CN SEMINAR

at 16.00 hrs – CN Auditorium

bldg 31, 3-005

Cluster Automated Operations Service (CAOS)

by Steve CARNEY / CERN-CN

The CAOS software is a result of a CERN-Digital Joint Project to automate specific areas of system management. In the move towards an automated environment, there are general techniques that can be applied to selected problem areas. The techniques may vary from simple retry strategies to rule-based systems. The general structure of the implementation running on the VXCERN and VXENG clusters will be presented. The main topics include :

- *user interface*
- *periodic job scheduling*
- *client/server communication*
- *disk backup*
- *disk restoration*
- *file restoration*
- *mail transactions*

- process monitoring
- human intervention
- automated strategies
- extensibility.

In addition to presenting the current implementation work in progress and future plans will be discussed.

Thursday 13 December

TECHNICAL PRESENTATION

09.00 to 17.30 hrs – Car park along the Meyrin road between the main entrance and bldg 33 (Reception)

Silicon Graphics Computer Systems (USA/CH)

Silicon Graphics' Magic Bus will show hands-on demonstrations of the broadest family of binary compatible 3D graphics systems and servers, from the Personal IrisTM to the POWER SeriesTM graphics systems and servers, plus some new products like :

- *Power VisionTM, a combination of graphics and CPU power, offering both supercomputing and high performance graphics*
- *Our 4D/380S server, providing over 200 MIPS and more than 30 DP MFLOPS of sustained performance*
- *VideoCreator, the first complete, integrated video interface that allows users to record computer-generated images onto standard or professional videotape, providing a complete solution to users who want to record real-time, high resolution images directly off their workstation screens or for those who want to produce computer-generated animations using frame-by-frame recording techniques*
- *Live Video Digitizer, mixing live color video images operating at a full 30 frames per second with high-resolution real-time 3D graphics in a window on the same superworkstation by adding a plug-in board and VCR or video camera cabling inputs to any of the Silicon Graphics Power Series.*

Call the Lausanne office number to receive products information : (021)25 94 12.

Languages : English, French

Information : M. Diraison / FI / 4585

Friday 14 December

MEETING ON

PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

QED effects in small angle Bhabha scattering

by S. JADACH / CERN

A variety of Monte Carlo and semianalytical results on QED effects in small angle Bhabha scattering will be presented. In particular the size of corrections beyond $O(\alpha)$ for semirealist cuts will be discussed.

Friday 14 December

COLLOQUIUM ON EMERGING STANDARDS IN APPLICATIONS SOFTWARE

at 14.00 hrs – CN Auditorium
bldg 31, 3-004

CASE standards and SQL2

by Susan LIVESEY / Oracle, UK

This is the fourth talk in the series. Current initiatives in standards for Computer Aided Systems Engineering (CASE) will be reviewed. These standards are the ISO Information Resource Dictionary System, as well as IBM's AD/Cycle, and the corresponding DEC systems. There will be a briefing on Oracle's involvement in the CASE standards arena, and what it is doing to comply with the emerging standards. There will also be a brief overview of the new ISO SQL2 standard.

Monday 17 December

ISOLDE COMMITTEE

Open session

at 14.00 hrs – Council Chamber

1. *Introductory remarks (B. Jonson)*
2. *Status of Booster-ISOLDE project (D. Simon)*
3. *Moving of the ISOLDE separators (E. Kugler)*
4. *ISOLDE running 1990 (H. Haas)*
5. *Recent target-ion source developments (H. Ravn)*
6. *Requests for off-line running 1991 :*
 - a) *IS130 High precision direct mass determination (H.J. Kluge); (IP-09 Add. 1)*
 - b) *IS80/84 Collinear laser spectroscopy (R. Neugart); (IP-35 Add. 1)*
 - c) *IS270 Microscopical studies of structural and electronic properties of semiconductors (D. Forkel); (IP-56 Add. 2)*
 - d) *IS31 Radioactive ions for surface characterization (H. Haas); (IP-33 Add. 1)*
7. *Any other business*

Closed session

Tuesday 18 December
at 09.00 hrs – DG Conference Room
bldg 60, 6th floor

Monday 17 December

SPECIAL COLLOQUIUM

LECTURES BY THE NOBEL LAUREATES 1990

at 16.00 hrs – Auditorium*

Deep inelastic scattering : the early years

by R. Taylor

Deep inelastic scattering : experiments on the proton and the observation of scaling

by H. W. Kendall

Deep inelastic scattering : comparisons with the quark model

by J. L. Friedman

* Refreshments will be available after the Colloquium (at about 18.00 hrs) in the Salle des Pas perdus

Mardi 18 décembre

PRESENTATION TECHNIQUE

à 09.00 h et à 10.30 h – bât. 865, salle 1-D17

S. à r.l. Eliostar (F) propose une démonstration de la facilité d'utilisation du COPRAX (polypropylène) en installation, transformation et entretien de tuyauteries, tubes et raccords

Langue : français

Renseignements : M. Diraison / F1 / 4585

Tuesday 18 December

CN TECHNICAL PRESENTATION

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

IBM Fortran compiler technology for the RS/6000

by Bill HAY / IBM Toronto

Language : English

Organizer : C. Parkman / CN

Mercredi 19 décembre

SEMINAIRE PS

à 11.00 h – Amphithéâtre PS

Compensation de la charge de faisceau dans les cavités du PS au moyen d'un dispositif de contre-réaction avec un retard d'un tour machine

par F. BLAS & R. GAROBY / CERN-PS

TRAINING AND EDUCATION ENSEIGNEMENT

ENSEIGNEMENT GENERAL

Tél. 5811 ou 2844 (le matin)

Jedi 13 décembre

de 13.00 h à 13.30 h – Amphithéâtre

Science pour tous

par R. CARRERAS

Le dernier cours de 1990 aura lieu le 20 décembre puis reprendra le 10 janvier 1991.

ACADEMIC TRAINING

Tél. 2844 (le matin)

10, 11 & 12 December

11.00 to 12.00 hrs – Auditorium

The physics of nucleus-nucleus collisions

by C. DETRAZ / Laboratoire de Physique corpusculaire, ISMRa, Caen

SERVICE D'APPUI LINGUISTIQUE LINGUISTIC SUPPORT SERVICE

Secrétariat (après-midi seulement) : 3127

Secrétariat (afternoons only) : 3127

ANGLAIS - FRANCAIS

Les inscriptions à ces cours sont ouvertes dès maintenant pour le prochain trimestre :

Anglais : 07 janvier au 22 mars

Français : 14 janvier au 28 mars

Les formulaires d'inscription sont à votre disposition en libre service au Bât. 54, au rez-de-chaussée, en face du bureau R.001.

Ces cours s'adressent à toute personne travaillant au CERN ainsi qu'aux conjoints.

Pour toute information, veuillez contacter Mme Benz, Tél. 3127, après-midi seulement, Professeurs d'anglais, Tél. 2957 Professeurs de Français, Tél. 3128