

Prévention de l'alcoolisme

Le Comité discutera à sa prochaine réunion la brochure proposée.

Cessation du travail par roulement

Le Comité a été informé par l'Association du Personnel que les dispositions prises pour la réduction progressive de l'indemnité versée aux personnes qui doivent arrêter le travail par roulement pour des raisons médicales ou par décision de la hiérarchie ne donnaient pas satisfaction. G. Michel s'est chargé de trouver une solution à ce problème, qui respecte l'esprit avec lequel le CCP a mis en place cette procédure.

Détachements et mises à disposition

G. Michel a informé le Comité qu'il attendait l'avis du Chef du Service juridique au sujet de la situation de ces personnes et l'Association du personnel a réitéré son avis selon lequel il serait préférable qu'elles reçoivent le statut de membre du personnel titulaire.

La prochaine réunion aura lieu le 2 mai 1990.

reduction of the indemnity paid to those who have to stop shift work for medical reasons or following a decision of the Management were not working satisfactorily. G. Michel undertook to find a solution to this problem which respects the spirit in which the procedure was introduced.

Detachments and secondments

G. Michel notified the Committee that he was awaiting the considerations of the Head of the Legal Service concerning the status of these people, and the Staff Association reiterated their viewpoint that it would be preferable for them to be given the status of staff members.

The next meeting will take place on 2 May 1990.

SEMINARS SEMINAIRES

Lundi 30 avril

SEMINAIRE AT

à 11.00 hrs – Amphithéâtre LEP
bât. 30, 7e étage

Le(s) vide(s) des accélérateurs CERN

par H.P. REINHARD / CERN-AT/VA

Depuis la récente restructuration toutes les activités 'vide des accélérateurs' sont regroupées au sein d'un seul groupe (AT/VA). La taille des machines va du plus petit (LEAR) au plus grand (LEP), la gamme du vide du 10^{-6} Torr (lignes de transferts) au 10^{-12} Torr (LEAR). Les projets à l'étude ou en cours sont LEP200, LHC (= une énorme cryopompe) et les ions plomb qui nécessitent d'améliorer le vide du Booster et du PS d'un facteur 10.

Monday 30 April

PRESENTATION

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

AUDITOR – a VAX/VMS security auditing product

by Ray CHAPMAN / PIP Systems Software Ltd, UK

AUDITOR is a utility which performs various VMS security checks on behalf of the system manager. Its main purpose is to highlight possible security weak-

nesses, working on the basis that prevention is better than cure. AUDITOR is used by many large organizations world-wide to be as certain as possible that their VAX/VM systems have installed all the controls that can be applied. It is virtually a corporate standard within British Petroleum and may soon also be one with British Telecom. It is also installed on the Central VAXCluster and we will try to arrange a demonstration of the product during or after the talk.

Wednesday 2 May

PS SEMINAR

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

Self-consistent beam dynamics at the beam-beam limit (Symmetric and Asymmetric Ring Colliders)

by Jeffrey L. TENNYSON / Caltech, USA

Recent interest in high luminosity B-Factories have prompted renewed studies of the beam-beam interaction. This paper reviews the theory of self-consistent equilibria (of beam blow-up) and shows how it enters into the problem of maximizing luminosity. It is shown that the equilibria are of three types : stable focus, stable node, or unstable saddle point. The natures of these equilibria are more easily analysed and understood within the framework of

the weak-strong model. The equivalence between the weak-strong and strong-strong pictures is demonstrated. The stabilities of the equilibria are derived in the context of the weak-strong model. It is shown that symmetric beams can undergo bifurcations analogous to second order phase transitions, leading to a flip-flop condition. Bifurcations can also occur in asymmetric colliders, though there they are analogous to first order phase transitions. Flat beams are shown to be more stable to flip-flop than round beams. The problem of optimizing the luminosity is discussed. It is shown that maximum luminosity is obtained when the two beams have the maximum currents possible, with the beam emittances adjusted to put both beams at the beam-beam limit. It is further shown that the problems that are expected to be encountered in asymmetric colliders result not from the asymmetry, but from the fact that the two beams are in different rings. So-called 'energy transparency' is not an optimal constraint and should not be adopted. The differences between the simple (no blow up) model of the beam-beam interaction and a more realistic model (the one used in modern simulations) is discussed in detail.

Wednesday 2 May

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Cosmic axions

by R. DAVIS / Institute for Advanced Studies, Princeton

The topics discussed will be :

- *all known mechanisms for axion production in the early Universe*
- *axion strings in radiation dominated cosmologies*
- *axions in inflationary cosmologies*
- *windows, curtains and cracks for the axion scale*
- *the lower bound from SN 1987A confronts the upper bound from string radiation*
- *prospects for detection*

Mercredi 2 & jeudi 3 mai

PRESENTATIONS TECHNIQUES

Mercredi 2 mai à 14.00 h

Jeudi 3 mai à 09.00 et 14.00 h

bât. 17, 1-007

Présentation du logiciel LabVIEW 2, système d'instrumentation électronique développé par la société National Instruments de Austin (USA)

- *acquisition de données : GPIB, RS232, VXI, Mac VEE*
- *analyse de données : DSP, filtrage, FFT, statistiques, matrices*
- *présentation et stockage tirant le meilleur parti des Macintosh 11fx*

Organisateurs : National Instruments France, CIP et Bergoz

Langues : français + anglais pour questions et réponses

Renseignements : M. Diraison / FI / 4585

Wednesday 2 May*

EP SEMINAR

at 16.30 hrs – Auditorium

The decay $K_L \rightarrow ee\gamma$

by Giles BARR / Fellow, CERN-EP

The NA31 experiment at CERN has recently collected a sample of Dalitz decays of the K_L meson ($K_L \rightarrow ee\gamma$) which is 200 times bigger than the previous world data sample. The experimental methods used to obtain the data sample and the interpretation of the events with high electron pair invariant mass will be discussed.

* Please note unusual day

Thursday 3 May

TECHNICAL SEMINAR

09.00 to 12.00 hrs & 14.00 to 17.00 hrs

Council Chamber

Presentation of LOG/IC software

by ISDATA (D) and Kontron Electronics SA (CH)

09.00 to 12.00 hrs

- *Background of LOG/IC and ISDATA*
- *Different optimizers for different structures PAL, PLA, ROM, LCA of XILINX*
- *LOG/IC input, syntax*
- 14.00 to 17.00 hrs (continuation)
- *Verifier (functional simulator)*
- *PLD Database*
- *Schematic interface and macro library*
- *Questions and answers*

Language : English

Information : M. Diraison / FI / 4585

Thursday 3 May

ISOLDE SEMINAR

at 16.00 hrs - TH Conference Room

Deformed intruders in light nuclei far from stability

by A. POVES / Univ. Autonoma de Madrid

The behaviour of very neutron rich nuclei around $N = 20$ is studied. Deformed intruder states are shown to be responsible for the observed shape transition at $N = 19, 20$. The intruders may have exotic decay modes that are in correspondence with those predicted in the 'neutron halo' picture of the nucleus.

Friday 4 May

MEETING ON

PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

On higher order electroweak radiative corrections at LEP

by S. JADACH / Krakow

It is of great practical importance to know what is the precision of the various QED radiative corrections for LEP measurements (in the Z line shape, luminosity, asymmetries, etc.). There is no ready answer to this question. The honest solution requires higher order calculation. I shall present a variety of numerical (Monte Carlo) and analytical results indicating that Yennie-Frautchi-Suura (YFS) type exponentiation makes perturbative expansion very convergent. In particular I shall demonstrate a strong indication that the YFS exponentiation is better than the Kuraiev-Fadin prescription used currently by (practically) all authors. The very convincing argument comes from calculating (analytically and with MC) the third order correction to electron structure functions and the total cross-section. On the other hand I compare the first and second order numerical results from the full scale YFS type Monte Carlo (YFS3 MC program including the initial and final state Bremsstrahlung) and I again find the fast convergence phenomenon. The relevant MC results are nicely parametrized with the simple semi-analytical formulas. The presented MC and (semi-) analytical results come from the exponentiation and leading-log calculations (and the mixtures of both). I shall therefore explain the basic difference between these two techniques.

Monday 7 May

EP SEMINAR

at 16.30 – Auditorium

CASA : a detector for Gamma Ray Astronomy

by Leslie ROSENBERG / Univ. of Chicago

The Chicago Air Shower Array (CASA) is a large-area above-ground scintillator array designed to study PeV sources. The detector consists of more than 1000 subdetectors distributed on a 15m square grid. Half of the detector is built and taking data. This detector, coupled with a companion large underground muon detector, constitutes a powerful instrument for the study of point sources. We report our current status, and give a very preliminary peek at data.

Tuesday 8 May

SPECIAL PS SEMINAR

at 14.30 hrs – PS Auditorium

Pulse power applications

by Rolf DETKLEFSEN / Maxwell Laboratories

Tuesday 8 May*

CN SEMINAR

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

Does Santa Fe lie at the end of the trail?

by D.O. WILLIAMS / CERN-CN

* Please note unusual day!

Wednesday 9 May

PS SEMINARS

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

*Please note : two separate sessions,
half an hour each*

Stochastic cooling progress at FNAL

by Dave MC GINNIS / Fermilab

Fermilab booster – present intensity limits and upcoming improvements

by Vinod BHARADWAJ / Fermilab

Wednesday 9 May

COMPUTER SEMINAR

at 16.00 hrs – Auditorium

Major developments in telecommunications technology and its application

by A. M. RUTKOWSKI / International Telecommunications Union

Jeudi 10 mai

PRESENTATION TECHNIQUE

à 08.30 h – Amphithéâtre LEP
bât. 30, 7e étage

*Microcos SA (CH) présente les logiciels LEX (UK)
la bureautique intégrée, de MS-DOS à VMS*

TRAINING AND EDUCATION ENSEIGNEMENT

ACADEMIC TRAINING

Tél. 2844-3364

30 April, 3 & 4 May

11.00 to 12.00 hrs – Auditorium

Is the Universe top-heavy?

by J. ELLIS / CERN-TH