

fully-formed physical quarkonia in the confined medium of a heavy nucleus can be tested in the experiment with a nuclear beam incident on a hydrogen target, which becomes feasible with the advent of the Pb-beam at the CERN-SP

Friday 18 November

PRESENTATION

at 14:00 – CN Auditorium, bldg 31/3-005

LynxOS on PowerPC and other Lynx developments

by Mark Overgaard, Lynx Real-Time Systems Inc., Los Gatos, California

CANCELLED

Monday 21 November

CAS ACCELERATOR SEMINAR

at 14:30 – Main Auditorium

The Tenth Lecture in the John Adams' Memorial Lecture Series

Electron spin polarisation at HERA recent results and future plans

by Reinhard Brinkmann, DESY

The spin rotator pair was installed in the HERA electron ring during the 1993/1994 winter shutdown. On 4th May 1994 the machine was well tuned for high transverse polarisation (about 65%) and the rotator switched on for the first time. A longitudinal polarisation level of 55% was obtained without further optimisation, thus proving for the first time that longitudinal spin polarisation in a high energy storage ring is indeed possible.

This lecture reviews the present status of the work done on spin polarisation at the HERA electron ring. The theoretical and experimental concepts applied for achieving high degrees of transverse and longitudinal polarisation are described. The experience with polarisation during e/p luminosity operation is summarised and the prospects for future experimentation at HERA with a longitudinal polarised electron beam are discussed.

*Tea and coffee will be served after the lecture (~16.00h) in the Salle des Pas Perdus

Monday 21 November

TECHNICAL PRESENTATION

10:00 - 16:00 – bldg 17/1-007

New Gauss/Tesla meters

by F. W. Bell (USA) and Isatel Electronic AG (CH)

Information: M. Diraison / FI-A / 4585

Tuesday 22 November

TECHNICAL PRESENTATION

at 10:00 – CN Amphitheatre, bldg 31/3-005

HP-UX 10.0 presentation

by Olivier Martinet H.P., Geneva consultant organisation.

Tuesday 22 November

CERN PARTICLE PHYSICS SEMINAR

at 16:30 – Auditorium

Exciting LEAR physics LEAPs in 1994

by E. KLEMPPT, University of Bonn, Germany

Wednesday 23 November

PS SEMINAR

at 11:00 – PS Auditorium, bldg 6

AUSTRON - A pulsed neutron spallation source for the central European region reported

by P. Bryant (on behalf of the AUSTRON Study Group)

Thursday 24 November

INSTITUTION OF ELECTRICAL ENGINEERS LECTURE

at 16:30 – Council Chamber

Artful aids in command of prosperity

by Prof. Allen T. Johns, Head of School of Electronic and Electrical Engineering University of Bath

Friday 25 November

ISOLDE SEMINAR

at 16:00 – TH Conference Room

The Doubly Closed Shell Nucleus ^{132}n : Collectivity and p-h states

by B. Fogelberg, The Neutron Research Laboratory, Studsvik, Uppsala University

EDUCATION SERVICES EDUCATIFS

ENSEIGNEMENT GÉNÉRAL

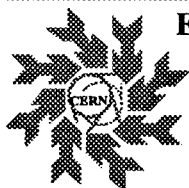
Tél. 5811

Jeudi 17 novembre

à 13.00 h – Amphithéâtre

Science pour tous

par Rafel CARRERAS



ENSEIGNEMENT TECHNIQUE TECHNICAL TRAINING

Monique Duval 44.60
eductech@cernvm

Informations sur les cours, dates et places disponibles sur serveur :
Information about the courses, dates and places available on server :
PE Division - SRV1_PE (Guest) - COM - TRAINING -
CourSET.fm (sans mot de passe - no password)

Technical Seminar

Fuzzy Logic basics to practical aspects

Laurent Lemaître* / Berkeley Univ.-EPFL

January 10-11-12-13, 1995 (mornings)

This course aims to provide a practical introduction to the concepts behind fuzzy logic and fuzzy set theories. MATLAB-based simulations of fuzzy control systems will be proposed to better understand fuzzy logic basics. Commercial tools used for developing specific fuzzy logic based applications will be discussed. It is particularly addressed to developers who are interested in understanding and evaluating the ideas that form the fuzzy theories. It is also recommended for technical managers who are in charge of control system development projects.

The main objective of the course will be to give the participants the basics of fuzzy theories with emphasis through MATLAB-based simulations of fuzzy control systems.

Part I : 2 mornings

- basics of fuzzy set theory
- basics of fuzzy logic theory
- basics of possibility theory
- fuzzy logic-based control
- commercial software and hardware solutions

Part II : 2 mornings

Basic fuzzy logic-based systems will be developed and simulated by the participants.

- Short introduction to MATLAB
- Mamdani-type controller
- Sugeno-type controller
- PID vs fuzzy logic-based controllers.
- Advantages and drawbacks
- What fuzzy control is not ?

If you wish to apply for this course, please fill in the usual "Application for training" form which can be obtained from your Divisional secretariat or your Divisional Training Officer (DTO).

A financial contribution of CHF 400,- per person will be charged to the Divisions.

* Laurent Lemaître is currently industrial visitor fellow in the laboratory conducted by Prof. Zadeh at the University of Berkeley. His main interests concern the applications of fuzzy logic to control and the development of fuzzy logic-based integrated circuits.

INFORMATIONS GENERALES GENERAL INFORMATION

Assurance contre la perte de salaire

L'AUSTRIA Assurances est heureuse de pouvoir offrir à tout membre du personnel du CERN (jusqu'à 60 ans révolus) la possibilité de s'assurer contre le risque de perte de salaire résultant d'un congé prolongé pour maladie ou accident non-professionnel (Art. RII 4.14 des Statut de Règlement du Personnel). La prime annuelle est de 0.1% du salaire de base annuel et sera déduite du traitement net de l'assuré, en janvier de chaque année d'un seul montant.

Les personnes intéressées sont invités à contacter le bureau d'AUSTRIA (rez-de-chaussée du bâtiment principal) qui tient à leur disposition une feuille d'information donnant de plus amples précisions.

AUSTRIA Assurances SA

Loss of Salary Insurance

AUSTRIA has the pleasure to inform you, that we can provide to all CERN staff members (until the age of 60) the opportunity to be insured against the loss of salary in case of non professional accident or illness. (Art. RII 4.14 of the Staff Rules and Regulations). The annual premium amounts to 0.1% of the basic annual salary and will be deducted by a single drawing, directly from the basic salary in January of each year.

Those interested can contact our CERN office (ground floor - Main building) where they can obtain an information sheet.

AUSTRIA Assurances SA

ART & PHYSICS

"TRACES"

An installation by the artist Monica Sand, at the Forum gallery in Stockholm Sweden. The exhibition will run from November 12 to December 11, and will simultaneously be presented on the World Wide Web.

In her art Monica Sand tries to find a connection between art & physics - since both try to give a manifestation of "reality" - by using material and knowledge from CERN.

In the exhibition "traces" she uses parts from an endcap from UA2 (scintillators, wavelength shifters, inox plates).

In 1992 she worked at CERN, making the sculpture "objects from Gargamelle", placed in beside the Gargamelle bubble chamber in front of the Microcosm exhibition.

"Traces" will be featured in IT-Online, Scandinavia's first on-line publication, which in this way celebrates CERN, the home of the WWW initiative.

IT-Online can be found on <http://www.it.sics.se>.

Commandes de câbles

Depuis le mois de mai 1994 toutes les demandes internes d'achat (DAI) de câbles sont transmises au "contrôleur des câbles" (M. Tavlet, TIS-CFM, tél. 3717) qui vérifie la conformité de ceux-ci aux spécifications de l'Instruction de Sécurité 23 en fonction de la sécurité au feu et de la résistance aux radiations.

Pour éviter tout délai supplémentaire dans le traitement de votre demande d'achat, il vous est recommandé de prendre contact avec M. Tavlet dès l'établissement de votre DAI et de lui faire parvenir les informations pertinentes sur la composition du câble, son comportement au feu, etc. S'il s'avère impossible d'obtenir ces informations de la part du fournisseur, un échantillon de câble pourra être exigé afin de lui faire subir les tests requis.

TIS/CFM

Cable ordering

Since May 1994, all Internal Purchase Requests (DAI) to buy cables are transmitted to the "cable controller" (M. Tavlet, TIS-CFM, Tel. 3717) who checks their compliance with the requirements of the Safety Instruction 23 with respect to fire safety and radiation resistance.

To avoid any additional delay in the handling of your order, it is recommended that you take contact with M. Tavlet as soon as you write your DAI and that you let him have all relevant information concerning the cable composition, fire resistance, etc. If it appears impossible to get this information from the supplier, a cable sample can be requested to subject it to the required tests.

TIS/CFM

REDUCTION DE LA PUISSANCE SUR LE RESEAU EOS Alimentation du Site de Meyrin

Le contrat passé entre EOS (Energie Ouest Suisse) et le CERN introduit **une période tarifaire mobile** pendant la période d'hiver, du 1er novembre au 31 mars.

Le but de cette période mobile est de cerner les heures les plus chargées d'hiver.

Cette période mobile comprend 400 heures, "Heures Mobiles" (HM) non déterminées à l'avance et fixées par EOS avec un préavis d'au moins 12 heures. Pendant ces heures le tarif appliqué par EOS est extrêmement élevé. Aussi dans l'intérêt de tous, chacun est invité à réduire sa consommation et également s'abstenir d'effectuer des essais ou des travaux demandant une forte puissance.

Les informations sur ces Heures Mobiles seront affichées sur les pages vidéo public PS, SPS et LEP. Un message sera également disponible sur VM.

Groupe ST/IE

REDUCTION IN ELECTRICAL POWER SUPPLIED BY EOS Electrical supply of Meyrin Site

The new contract between EOS (Energie Ouest Suisse) and CERN introduces a special tariff period in Winter (1st November - 31st March), called the **flexible period**.

The purpose of this period is to target the hours in winter when the demand is at its highest.

This flexible period comprises 400 hours "Mobile Hours" (HM) which are not predetermined but set by EOS with at least 12 hours notice.

During those hours, CERN will be charged at a very high tariff for energy consumed. In the interest of all concerned, staff are invited to reduce its electrical power consumption and should refrain from carrying out tests and work requiring high power. Information about "Mobile Hours" will be given on the public video pages of PS, SPS and LEP. The message will also be available on VM.

ST/IE Group

**REDUCTION DE LA FOURNITURE D'ELECTRICITE
PENDANT LES 'PERIODES CRITIQUES' DE L'HIVER
1994-1995**

Comme les années passées, le CERN a conclu avec l'EDF (Electricité de France) un contrat par lequel le CERN accepte de réduire sa puissance à la demande de l'EDF pendant les 'périodes critiques' d'exploitation du réseau, en échange de conditions avantageuses de tarification.

La période contractuelle d'obligation de délestage commence le 1er novembre 1994 et se termine le 31 mars 1995. Pendant ces cinq mois, le CERN devra réduire sa puissance prise au réseau EDF de 160 MW à 35 MW pendant **22 périodes de 18 heures**, commençant à 07.00 h et se terminant à 01.00 h le lendemain, sur simple préavis de l'EDF (auprès de la salle de contrôle ST : TCR) donné à 17.00 h pour le lendemain. Ce préavis pourrait être de deux heures le lendemain des week-ends et jour fériés, et nul si les conditions d'exploitation l'exigent.

Pendant ces périodes, les accélérateurs du LEP, du SPS, du PS, le Générateur Est et le Booster seront mis en veille, ainsi que les spectromètres et les éléments de transfert des faisceaux de toutes les zones expérimentales SPS, LPI, les détecteurs et équipements de physique des expériences LEP aux points 2, 4, 6 et 8, les zones de test au SM18 et au bâtiment 921 (ECA4). Cela se fera, soit automatiquement à partir d'informations transmises par l'ordinateur de comptage EDF, soit par les opérateurs des salles de contrôle MCR, PCR, CRN et TCR. Les opérations de délestage débuteront à 06.45 h et se termineront le lendemain matin à 01.00 h.

Pour avertir le personnel et tous les utilisateurs de ce délestage survenu, des panneaux avertisseurs clignotants avec la mention

CRITICAL PERIOD
Reduce Power Consumption

seront disposés :

1. par les pompiers à l'entrée du SPS et à l'entrée de la zone SM18
2. par le service électrique aux entrées des points 2, 4, 6 et 8 du LEP, et aux trois entrées A, B et C du site de Meyrin.

Un message analogue sera affiché sur les écrans vidéo.

Dans l'intérêt de tous, chacun devra s'abstenir d'effectuer des essais ou des travaux demandant une forte puissance pendant ces périodes critiques, car l'énergie y est 5 fois plus chère que les autres jours d'hiver (20 fois plus chère qu'en été). D'autre part, toute tendance au dépassement des 35 MW souscrits entraînerait un délestage vigoureux au niveau du poste d'arrivée, qui compromettrait le redémarrage des accélérateurs.

Paul Chevret
ST/IE/ER

**REDUCTION IN ELECTRICITY SUPPLIES
DURING 'CRITICAL PERIODS' IN WINTER
1994-1995**

As in previous years, CERN has again signed a contract with EDF (Electricité de France), by which it undertakes, in return for special prices, to reduce its electricity consumption at the request of EDF when the grid system is undergoing a peak demand.

The contractual period for compulsory load-shedding begins on 1 November 1994 and ends on 31 March 1995. Over these five months, CERN will have to reduce the power it takes from the EDF network from 160 MW to 35 MW during **twenty-two 18-hour periods**, each beginning at 07.00 hrs and ending at 01.00 hrs on the following day. Notice will be given by EDF (to the ST control room : TCR) at 17.00 hrs on the previous day. The period of notice may be two hours on days following weekends and public holidays, or zero hours for technical reasons.

During these periods, LEP, the SPS, the PS, the East generator and the Booster will be put on stand-by, as well the spectrometers, beam transfer equipment in SPS and LPI experimental areas, detectors and equipment for the experiments, LEP points 2, 4, 6 and 8, the test areas at SM18 and building 921 (ECA4). This will be carried out either automatically, on the basis of data transmitted by the EDF metering computer, or by the operators in the MCR, PCR, CRN and TCR control rooms. Load-shedding will begin at 06.45 hrs and will end at 01.00 hrs on the following day.

In order to inform Staff and Users that load-shedding has taken place flashing signs with the following warning

will be placed :

1. by the security staff at the entrance of SPS and at the entrance to area SM18
2. by the electrical Service Staff to LEP points 2, 4, 6 and 8, and at the three entrances A, B and C of the Meyrin site.

A similar message will be displayed on the video screens.

In the interest of all concerned, staff should refrain from carrying out tests or work requiring a heavy current, because the electricity on these days will cost 5 times as much as it does on any other winter day (and 20 times more than it does in summer). Moreover, any trend toward exceeding the 35 MW limit would cause a sudden load-shedding at the input station, which could jeopardize the start-up of the accelerator.

Paul Chevret
ST/IE/ER

LA GRANDE -BRETAGNE AU CERN

Du 22 au 25 novembre 1994

Hall du Bâtiment de l'Administration

Bât. 60 – 1^{er} étage

09h30 – 17h00 (vendredi 12h00)

Trente sociétés britanniques présenteront leurs techniques et leurs produits les plus récents dans le domaine de la mesure, de l'électronique, du vide, etc.

L'exposition est organisée par GAMBICA, Association britannique pour l'industrie de la mesure, de la commande et de l'automatisation dans le Royaume-Uni, en collaboration avec le Département du Commerce et de l'Industrie britannique et le Consulat général de Grande-Bretagne à Genève.

Vous trouverez ci-après :

- la liste des exposants,
- la liste des conférences qui sont prévues pendant l'exposition.

Vous pourrez obtenir, en temps utile, un programme détaillé :

- au secrétariat de votre division
- à la réception, bât. 33
- à l'exposition même.

BRITAIN at CERN

22 to 25 November 1994

Administration Building

Bldg 60 – 1st floor

09.30 hrs – 17.00 hrs (Friday 12.00 hrs)

Thirty British companies will be featuring their latest techniques and products in the field of instrumentation, electronics, vacuum, etc.

The exhibition is being organized by GAMBICA, the Association for the Instrumentation, Control and Automation Industry in the UK, in cooperation with the British Department of Trade & Industry and the British Consulate General, Geneva.

There follows :

- the list of exhibitors
- the list of lectures which will be given at the exhibition.

A detailed programme will be available in due course at :

- your Divisional Secretariat
- the Reception information desk, bldg 33
- the exhibition.

LISTE DES EXPOSANTS LIST OF EXHIBITORS

1. A S Scientific Products Limited
2. Automatic Control Systems Limited
3. Bird Precision Bellows Limited
4. BVM Limited
5. Data Conversion Systems Limited
6. EEV Limited
7. Exacta Circuits Limited
8. Farmsum Associates
9. Fisons Instruments Vacuum Generators
10. Furmanite International Limited
11. GEC Marconi Defence Systems
12. GEC Plessey Semiconductors
13. Gould Instrument Systems Limited
14. HERF Industrial Liaison Unit
15. Hytec Electronics Limited
16. Loughborough Sound Images Limited
17. Marconi Instruments

18. Micron Semiconductor Limited
19. Morgan Matroc Limited
20. Oxford Instruments (UK) Limited
21. Penny & Giles Data Systems Limited
22. Pentland Systems Limited
23. Photek Limited
24. Radstone Technology PLC
25. Serco Europe Limited
26. Spectrolab Research Laboratories
27. Strachan & Henshaw
28. Thorn Microwave
29. Wavetek Limited
30. Westcode Semiconductors Limited

Information : M. Diraison / FI -A / 4585

BRITAIN AT CERN 94

22-25 November 1994

Wednesday 23 November

TECHNICAL PRESENTATION

at 10:00 – Council Chamber, bldg 503

Advanced surface engineering techniques to stabilise electrically stressed surfaces

by W. Taylor. Managing Consultant & Proprietor / Farmsum Associates

Advanced Ion and Plasma based surface engineering techniques can be used to modify the field and secondary electron emission characteristics of material electrodes. The same techniques can also modify the electrical conductivity of ceramics. Results will be presented which show how these techniques can be used to reduce field induced voltage breakdown and multipactor. The techniques are applicable to improve the performance of couplers, cavities and high voltage insulators used in high energy particle accelerators.

Duration: 40 minutes

at 11.00 hrs - Council Chamber, bldg 503

Latest developments in silicon detectors

by Colin D. Wilburn, Managing Director / Micron Semiconductor Ltd

Recent silicon detector developments and results will be presented for both CERN 'LEP' and 'LHC', Fermi National Laboratory's CDF and D0 and DESY's H1 project.

New detector designs and spin-off developments from the CERN work will also be discussed for other particle physics applications and X-Ray applications.

at 16.00 hrs - Council Chamber, bldg 503

Recent developments in micro channel plate photomultipliers

by Ian Ferguson, Sales Manager / Photek Ltd

Recent developments in ultra-fast micro channel plate photomultipliers are described. Rise times below 50 picoseconds have been achieved with single anode devices, and the latest data on these devices will be presented.

Multi pixel devices, with up to 96 anodes, and measurements of cross talk are given. Position sensing devices with much higher resolution and fast time response will also be described.

Duration: 30 minutes

Information: M. Diraison / FI-A / 4585

ATTENTION j'ai changé l'heure, 16h00 au lieu de 14h30. Merci!

Friday November 18, 1994, at 8.00 pm
Vendredi 18 Novembre 1994, a 20:00

CERN Main Auditorium / Amphithéâtre Bâtiment Principal

**MUSIQUE BAROQUE
ET TRADITIONNELLE DU PEROU**

- GUITARE -

JAVIER ECHECOPAR

Né au Pérou. Diplômé du Conservatoire National de Lima en 1978, Javier Echecopar a suivi des études à l'Ecole Normale de Musique de Paris et à la Guildhall School of Music à Londres. En 1988 il a reçu la médaille "Heitor Villa-Lobos Centennial Medal" du gouvernement brésilien.

Il a effectué pendant des années un important et profond travail de recherche sur les racines de la musique péruvienne autour de deux grands axes: la musique de la période coloniale et la tradition populaire. Ce travail a abouti à la publication de plusieurs recueils de musique péruvienne.

Il réalise chaque année des tournées de concerts à travers l'Europe, les Etats-Unis et l'Amérique du Sud. Il a été professeur au Conservatoire National du Pérou et il est régulièrement invité pour donner des cours dans différents pays européens et américains.

En 1993 il a été nommé correspondant à l'UNESCO, dans le cadre du Fonds International de la Culture - Artistes Transfrontières. Il vit et enseigne actuellement à Paris où il enregistre ses dernières compositions.

Réservations et Billets : Consulat du Pérou (tel. 022/731.19.12); Association "Los Amigos" (tel. 022/741.00.32) où à l'entrée 30 minutes avant le début du spectacle.

Entrée/Entrance CHF 20.-