

La guerre des étoiles, version antiprotonique

La collaboration LEAR PS205 (Tokyo, Okazaki, Munich, Budapest et CERN) a récemment remporté un double succès dans son offensive de destruction en vol de satellites par de puissantes impulsions laser. En l'occurrence, les satellites sont cependant des antiprotons et non pas des cibles militaires et, plutôt que de tourner autour de la Terre, ils sont en orbite autour de noyaux d'hélium (Courrier CERN, décembre 1994).

Un atome ordinaire devient antiprotonique dès lors qu'un antiproton remplace l'un de ses électrons orbitaux. En 1993, la collaboration avait découvert que, dans l'atome d'hélium, une impulsion laser en lumière visible pouvait stimuler des transitions entre certaines paires d'orbites antiprotoniques tout comme dans le cas des électrons. C'était déjà une surprise car l'antiproton, pensait-on, aurait dû "tomber" sur le noyau et s'y annihiler après quelques centaines de révolutions orbitales, trop rapidement pour permettre une stimulation laser nécessitant des centaines de milliers de révolutions.

A cet égard comme à bien d'autres, l'hélium semble constituer un cas particulier : des antiprotons peuvent survivre sur certaines des orbites pendant des dizaines de milliards de révolutions. La plupart des orbites sont cependant ordinaires et l'antiproton ne manque pas de les quitter immédiatement pour pénétrer dans le noyau. Aussi les membres de l'équipe disposent-ils d'une méthode extrêmement sensible leur permettant de déterminer quand



Les membres de la Collaboration LEAR PS205.

Members of the LEAR PS205 Collaboration.

Antiprotonic Star Wars

The LEAR PS205 collaboration (Tokyo, Okazaki, Munich, Budapest CERN) recently scored a double success in their programme of shooting down satellites with high powered laser pulses. However the satellites are antiprotons, not military targets, and instead of orbiting the earth they orbit helium nuclei (CERN Courier, December 1994).

An ordinary atom becomes an antiprotonic one when one of its orbiting electrons is replaced by an antiproton. In 1993, the collaboration found that transitions between pairs of antiproton

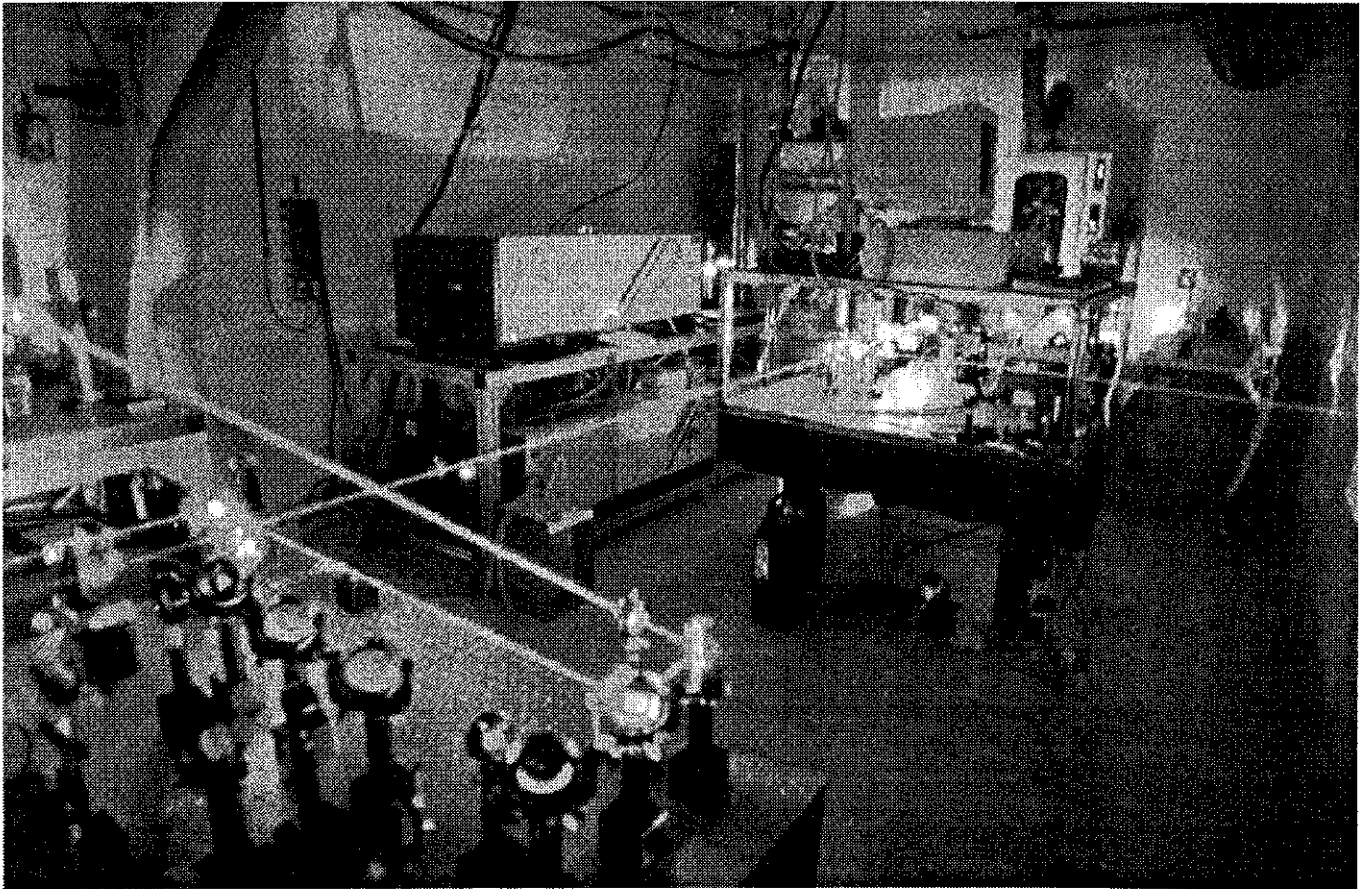
orbits in helium atoms can be stimulated by visible-region laser light just as they can in the electron case. This itself was a surprise – it was thought that the antiprotons would fall into the nucleus and annihilate after a few hundred orbital revolutions, leaving no time for laser stimulation, which needs hundreds of thousands of revolutions to work.

In this matter, as in many others, helium appears to be a special case – antiprotons can survive in some helium orbits for tens of billions of revolutions. Most orbits however are ordinary ones, from which the antiproton does fall immediately into the nucleus. This presented the team with an extremely sensitive way of knowing when their laser was tuned to the right wavelength to shoot the antiproton down from one kind of orbit to the other: they would see a sharp increase in the annihilation rate when the conditions were right.

le laser est réglé sur la bonne longueur d'onde pour faire "chuter" l'antiproton d'un type d'orbite à l'autre : ils observent alors une augmentation marquée du nombre des annihilations.

Les succès récents ont été obtenus avec de l'hélium-3 antiprotonique. Deux transitions orbitales ont été stimulées, l'une dans la zone rouge du spectre et l'autre dans le bleu. Les transitions spectrales sont extrêmement étroites;

The recent successes have been obtained with antiprotonic ^3He . Two orbital transitions have been stimulated, one in the red part of the spectrum and one in the blue part. The spectral transitions are extremely sharp and the lasers therefore had to be tuned with very high precision in order not to miss them. However, in contrast to the situation in 1993, when five days of wavelength scanning were necessary to find an expected transition, the



L'installation du laser pour l'expérience LEAR PS205.

The laser set-up for the LEAR PS205 experiment.

pour ne pas les manquer, le laser doit donc être réglé avec une très grande précision. Cependant, à la différence de 1993 où cinq journées d'observation en variant la longueur d'onde avaient été nécessaires aux expérimentateurs pour découvrir l'une des transitions escomptées, il leur a suffi d'une dizaine de minutes pour trouver la première et moins d'une heure pour la seconde. Cela tient pour une large part à l'amélioration des prédictions théoriques des niveaux d'énergie, qui s'approchent aujourd'hui à une trentaine de millièmes des valeurs mesurées. Du point de vue expérimental, la collaboration est parvenue à réduire la largeur de bande du laser de 10 GHz à environ 1 GHz et mesure les fréquences de transition au dix millionième près. L'atome d'hélium antiprotonique est donc en passe de devenir un outil d'investigation extrêmement précis des propriétés électromagnétiques intrinsèques des antiprotons.

experimenters spent only about ten minutes searching for the first one and less than an hour for the second. This was largely due to improved theoretical predictions of the energy levels, now within about 30 parts per million of the measured values. On the experimental side, the collaboration has been able to reduce the laser bandwidth from 10 GHz to about 1 GHz, and can measure the transition frequencies to one part in ten million. All this means that the antiprotonic helium atom is now on the verge of becoming a tool for investigating the antiprotons intrinsic electromagnetic properties to extremely high levels of precision.

SEMINARS

SEMINAIRES

Monday 28 August

DETECTOR SEMINAR

at 11.00 hrs – ECP Conference Room, bldg 13/2-005

Coherent Cherenkov radiation of e^+e^- -pairs and its application for the measurement of γ -beam polarization

by K.A. ISPIRIAN / Yerevan Physics Institute, Armenia

The dependence of Cherenkov radiation intensity of e^+e^- -pairs, produced by high energy γ -quanta ($E_\gamma > 20$ GeV) upon 1) the distance from the pair production point, 2) the radiator thickness taking into account the conversion probability and 3) the azimuthal angle ϕ with respect to the γ -beam linear polarization is calculated taking into account multiple scattering. As the estimates show, one can measure the polarization of the existing SPS γ -beams by detecting the expected ϕ -asymmetry with the help of RICH detectors developed in CERN.

Monday 28 August

ISOLDE EXPERIMENTS COMMITTEE

Open session

at 14.00 hrs – Council Chamber

1. Introductory remarks by the Chairman.
2. Progress report by the Isolde Technical Group Leader.
3. Isolde Coordinator's report.
4. Study of the statistical properties of the angular distribution of beta-delayed protons following the decay of oriented $^{73}\text{KrFe}$ (Clarendon Lab., Oxford - CERN - Univ. Maryland, Dept. of Chemistry - Schuster Lab., Manchester); ISC 95-23/P74: J. Rikowska.
5. Status Report and Beam Time Request (IS332) (IPN, Orsay - CRN, Strasbourg - IPN, Lyon - ISN, Grenoble - CNEA, TANDAR, Buenos Aires - IN2P3, Paris); ISC 95-25/P43 Add.1: J. Sauvage.
6. Beta Decay of ^{58}Zn . A critical test for the charge-exchange reaction as a probe for the beta decay strength distribution (Univ. Jyväskylä, Accelerator Lab. - CERN/ISOLDE - CRN, CNRS-IN2P3, Strasbourg); ISC 95-27/P75: A. Jokinen.

Closed session

after the Open Session, 6th Floor Conference Room, Main Building.

Tuesday 29 August

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

Review of electroweak results from EPS-HEP 95 Conference / Brussels

by P. WELLS / CERN

New, precise electroweak measurements presented at the recent Summer conferences will be summarised. These include measurements at the Z of the line shape, partial widths, and forward-backward asymmetries from the four LEP experiments and of the left-right asymmetry and $b\bar{b}$ -bar and $c\bar{c}$ -bar left-right forward-backward asymmetries from

the SLD collaboration. In the framework of the Standard Model, these measurements are compared to direct measurements of the W and top quark masses from the CDF and D0 experiments.

The combined electroweak measurements are used to constrain the parameters of the Standard Model, and to examine possible extensions to the model.

In view of the relatively poor agreement with the expectations of the Standard Model for the Z partial widths to $b\bar{b}$ -bar and $c\bar{c}$ -bar, the principal experimental methods for these measurements will be discussed.

* Tea & coffee will be served at 16.00 hrs.

Wednesday 30 August

SPECIAL COMPUTING COLLOQUIUM

The Inside Story of C++

Morning session:

10.00 to 12.00hrs – Auditorium

What C++ is and why

by Bjarne STROUSTRUP

This talk consists of three parts. First, the origins, aims, and design rules for C++ are described. Next, the key language features and the design and words about current uses of C++, the C++ standardization effort, and likely future uses of C++. The emphasis is on the reasons why C++ looks the way it does and how it can be used well, rather than on syntactic details or individual language features. I will attempt to illustrate how C++ is the result of a combination of sociological and language-technical principles. The language features mentioned are the ones that most directly supports data abstraction, object-oriented programming, and the design and use of large systems: classes, abstract classes, templates, class hierarchies, run-time type information, namespaces and templates. The speaker does not pretend to be an expert in numerical computation, but he will present the key language and standard library features supporting scientific and engineering computation.

(This talk does not presuppose understanding of C++).

Afternoon session:

16.00 to 17.30 hrs – Auditorium

The Standard C++ Library: facilities and techniques

Finally, C++ has a standard library of containers, iterators, and basic non-numeric algorithms. It has more; the STL is a theoretically sound, elegant, extensible framework into which users can fit their own containers and iterators so that code can be written to be independent of any particular container or iterator. Importantly, the STL also allows use of built-in C++ types such as arrays and pointers and impose no run-time or space overheads. This talk presents the basic techniques used in the design and implementation of the STL and gives a few simple examples of STL use. In addition, the C++ standard library also provides character strings, input/output, and some support for numerical programming. I will summarize these facilities and their related techniques as time allows.

Bjarne Stroustrup has a Ph.D. in Computer Science from Cambridge University. He is the designer and original implementor of C++ and

the author of "The C++ Programming Language" and "The Design and Evolution of C++". His research interests include distributed systems, operating systems, simulation, design, and programming. B. Stroustrup is the head of Bell Labs' Large-scale Programming Research department and an AT&T Bell Laboratories Fellow. He is actively involved in the ANSI/ISO standardization of C++ as the author of the base document and the chairman of the working group for extensions. Recipient of the 1993 ACM Grace Murray Hopper award.

Wednesday 30 August

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Gaugino condensation, duality and supersymmetry breaking

by Fernando QUEVEDO / University of Neuchâtel

A general discussion of the gaugino condensation process and its prospects of breaking supersymmetry in supersymmetric field and string theories is presented. Special emphasis is given to finding the low-energy effective action below condensation scale and to the role of different duality symmetries present in perturbative string theory and their survival after this non-perturbative effect.

Thursday 31 August

AC SEMINAR

at 16.30 hrs – AT Auditorium, bldg. 30, 7th floor

Superconductors and Magnets : Part 1

by Martin WILSON / CERN, AT-MA

The first lecture will give a general introduction to superconducting materials and their use in magnets.

Part 2, to be given later, will present more details about filamentary composite wires and Rutherford cables.

Friday 1 September

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

The berrmions, an approach to lattice QCD fermion simulations from negative flavour numbers

by Roberto PETRONZIO / Università di Roma
"Tor Vergata"

We estimate the effects of dynamical fermions in lattice QCD by extrapolating to positive flavour numbers the results from negative values obtained by adding to the pure gauge sector a fermion action where the fields obey a Bose statistics : the berrmions.

Monday 4 September

3RD INTERACTIVE MIGRATION USER MEETING

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

Electronic Mail Services and User Training

by Miguel MARQUINA / CERN

This is the third of the series of User Meetings devoted to the Migration of the User Community off the CERNVM mainframe. This time we will concentrate in two topics which deserve special attention from the user point of view.

The first will be an introduction to the new Electronic Mail Services being offered by CN Division. The second will be a presentation of our current plans concerning user training for the alternative services offered as replacement to CERNVM.

Additional information as well as the agenda may be found in WWW under:

<http://consult.cern.ch/umtf/presentations>

Alternatively you will find it as well in the next Weekly Bulletin.

Monday 4 September

PPE SEMINAR

at 16.30 hrs – Auditorium

Electroweak Measurements from D0

by Marcel DEMARTEAU / Fermilab

The cross sections for $W \rightarrow \ell \bar{\nu}$ and $Z \rightarrow \ell \ell$ ($\ell=e,\mu$) production in ppbar collisions at $\sqrt{s}=1.8$ TeV will be presented together with the width of the W -boson, derived from the ratio of these measurements. Direct measurements of the trilinear couplings ($WW\gamma$ and WWZ) of the electroweak gauge bosons are derived from the study of diboson production such as $W\gamma$, W^+W^- and WZ . These measurements test the non-abelian self-couplings of the W , Z and photon, one of the most direct consequences of the $SU(2)_L \otimes U(1)_Y$ gauge symmetry. Based on ppbar $\rightarrow \ell \bar{\nu} \gamma + X$ ($\ell=e,\mu$) events, ppbar $\rightarrow W^+W^- \rightarrow \ell \ell' \nu \bar{\nu}$ ($\ell=e,\mu$) and ppbar $\rightarrow e \nu + \text{jets}$, limits on anomalous WWZ and $WW\gamma$ couplings are derived. Also limits on $ZZ\gamma$ and $Z\gamma\gamma$ couplings are presented. A study of the extraction of α_s from the measurement of $W + \text{jet}$ production is briefly discussed.

Tuesday 5 September

LHCC REVIEW BOARDS (LCRB, LDRB, LERB)

Open session

at 09.00 hrs – Council Chamber

09.00 – 09.30 RD11 Status Report : Embedded architectures for second-level triggering [EAST] (NIKHEF-H Amsterdam–Inst. of Atomic Physics and Polytechnic Inst. Bucharest–Central Research Inst. for Physics Budapest–CERN–NBI Copenhagen–RAL–LHSE JINR Dubna–Inst.für Informatik Jena–Inst. of Nucl. Physics Krakow–Royal Holloway & Bedford New College London–Univ. College London–Manchester Univ.–Dept. of Computer Science V Mannheim–Inst. of Computer and Information Science Prague–Weizmann Inst. of Science Rehovot–Federal University Rio de Janeiro–Utrecht Univ.–Inst. of High Energy Physics Zeuthen; LHCC 95-45/LCRB Status Report/RD11; R.K. Bock).

09.30 – 10.00 RD13 Status Report: A scalable data taking system at a test beam for LHC (CERN–CPP Marseille–Budker Institute, Novosibirsk–Oxford–Pavia; LHCC 95-47/LCRB Status Report/RD13; L. Mapelli).

10.00 – 10.30 RD24 Status Report: Application of the scalable coherent interface to data acquisition at LHC (CERN–Dept. of Physics, Univ. of Oslo–LBL Berkeley–INFN La Sapienza Rome–INFN Lecce–IHEP Protvino–Univ. Valencia–Polytechnical Univ. of Valencia–RAL–Univ. Manchester–CIEMAT Madrid–Dolphin Interconnect–Solutions A.S. Oslo–Digital Equipment Corporation, Joint Project at CERN–Apple Computer Inc. Cupertino–Thomson–TCS Semiconducteurs Specifiques Orsay; LHCC 95-42/LCRB Status Report/RD24; H. Müller).

- 10.30 – 11.00 RD34 Status Report: Construction and Performance of an Iron-Scintillator Hadron Calorimeter with Longitudinal Tile Configuration (Argonne National Laboratory–Institut de Física d'Altes Energies, Univ. Autònoma de Barcelona–Univ. of Chicago–IAP Bucharest–LPC Clermont-Ferrand–CERN–JINR Dubna–Univ. of Illinois–LIP & Univ. Lisbon–Michigan State Univ.–Pisa Univ. and INFN–Charles Univ. & Academy of Science Prague–IHEP Protvino–COPPE/EE/UFRJ Rio de Janeiro–Stockholm Univ.–IFIC Valencia–Univ. of Texas Arlington–Yerevan Physics Institute LHCC 95-44/LDRB Status Report/RD34; M. Nessi).
- 11.00 – 11.30 RD42 Status Report: Development of diamond tracking detectors for high luminosity experiments at the LHC (MPI Heidelberg–LEPSI, CRN Strasbourg–Rutgers Univ. Piscataway–CPPM Marseille–Inst. für Hochenergiephysik, Akademie d. Wissenschaften Vienna–Ohio State–Bristol–Los Alamos Nat. Lab.–CERN–Sandia National Lab. Livermore–Lawrence Livermore Nat. Lab.–Pavia–Univ. of Toronto; LHCC 95-43/LDRB Status Report/RD42; H. Kagan).

11.30 – 12.00 Proposal: High Energy physics processing using commodity components [HEP PC] (U. A. Barcelona–CERN–JINR Dubna–Florida State–Faculté des Sciences de Luminy–U.C. Santa Cruz–Univ. Washington; LHCC 95-46/P61/LCRB; M. Delfino).

Tuesday 5 September

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

Evidence for neutrinos oscillations from muon decay at rest

by H. WHITE / Los Alamos

An experiment has been conducted at Los Alamos to search for $\bar{\nu}_\mu$ from positive muon decay at rest. A high intensity low energy pion source has been used to provide a source of neutrinos from π^+ decay at rest. π^+ are largely absorbed in this source in high Z material. The Liquid Scintillator Neutrino detector LSND has been used to search for $\bar{\nu}_\mu$ from this source and an excess of events over that expected from conventional physics has been observed. This observation and the interpretation will be discussed.

* Tea & coffee will be served at 16.00 hrs.

EDUCATION SERVICES EDUCATIFS

FORMATION EN ANGLAIS AUTOFORMATION ASSISTÉE

Cette formule permet l'**adaptation** de l'apprentissage aux **besoins individuels** et le travail à un **rythme personnel** en fonction des disponibilités de temps.

Elle ne convient en aucun cas à des débutants.

• *Quelles compétences peut-on développer?*

On peut développer la compréhension de l'oral et de l'écrit ainsi que les connaissances grammaticales et lexicales.

• *Déroulement*

Il s'agit d'un apprentissage **autonome "guidé"**, exigeant au minimum 5 heures de travail hebdomadaire, soit individuel, soit en binôme. L'apprentissage débute par un stage intensif de "**mise en autonomie**" (20 heures réparties sur une semaine).

Par la suite, les apprenants bénéficieront de 3 **tutorats**, de 3 **activités de remotivation** (expression orale) et de 2 **séances de regroupement** (échanges sur leur expérience de l'autoformation).

• *Ressources*

Les participants auront accès à une **salle de ressources** équipée de cabines de laboratoire de langues, d'une installation vidéo et de 3 ordinateurs. En plus du matériel pédagogique "classique", ils trouveront des matériels informatisés et multimédia. Ces derniers traitent la compréhension de l'oral, la préparation d'un déplacement, l'anglais

du téléphone et l'anglais pour ingénieurs et techniciens. A partir du mois d'octobre, nous bénéficierons d'un enseignement à distance : VIFAX. Cet outil permettra de travailler la compréhension orale à partir des bulletins d'information de Skynews et CNN.

• *Conditions*

L'apprenant s'inscrit **pour un an**.

Prix : Fr. 1.180,- comprenant le stage de mise en autonomie (20h, en groupe), les 3 tutorats (3h minimum en individuel), les 3 activités de remotivation (3h minimum, en groupe), les 2 séances de regroupement (6h au total, en groupe), le prêt de matériel et l'accès à la salle de ressources.

Le prochain stage de mise en autonomie aura lieu du 18 au 22 septembre à raison de 4 heures par jour (08h30-12h30).

Si vous êtes intéressé(e), veuillez remplir un formulaire de "Demande de Formation" et le renvoyer au plus tôt au Secrétariat des Cours de Langues.

Pour toute information complémentaire, contacter Ulrich Liptow, Responsable de la formation en anglais, tél. 2957 ou Moniek Laurent, Responsable de l'autoformation, tél. 8143.

INFORMATIONS GENERALES GENERAL INFORMATION

APPLICATIONS DES ACCELERATEURS

A la demande générale, toutes les photos parues dans le numéro spécial du Courrier CERN de juillet/août 1995, "Applications des accélérateurs", peuvent désormais être obtenues auprès des photographes du CERN (tél. 2429). Pour commander des épreuves ou des diapositives, nous vous prions de mentionner la référence AC 9.8.95.

Courrier CERN / DSU

APPLYING THE ACCELERATOR

By popular demand, all the pictures which appeared in the special "Applying the Accelerator" July/August 1995 issue of the CERN Courier are now available from the CERN photographers (phone 2429). To order prints or transparencies, please mention reference AC 9.8.95.

CERN Courier/DSU

CIRCULATION ROUTIÈRE

Suite à plusieurs plaintes, nous rappelons que les piétons sont prioritaires sur les passages protégés. Ce n'est pas seulement une règle du code de la route mais aussi une règle élémentaire de courtoisie.

Respectez également la vitesse à l'intérieur du CERN limitée à 50 km/h.

Groupe Sécurité générale (TIS/GS)

ROAD TRAFFIC

Following a number of complaints, you are reminded that pedestrians have priority on all pedestrian crossings. This is not only a rule of the Highway Code but an elementary courtesy rule as well.

Please also observe the speed limit of 50 km/h in force inside CERN.

General Safety Group (TIS/GS)

PUBLICATION DU BULLETIN HEBDOMADAIRE JEÛNE GENEVOIS Bulletin no 37/95

Le jeudi 7 septembre étant férié (Jeûne genevois), les articles à insérer dans le Bulletin no 37/95, paraissant le vendredi 8 septembre (et couvrant la semaine du lundi 11 septembre) devront nous parvenir **un jour plus tôt** qu'à l'accoutumée, soit le **lundi 4 septembre à midi**.

Merci de votre coopération.

Médias & Publications
Tél. 3475

WEEKLY BULLETIN PUBLICATION JEÛNE GENEVOIS Bulletin No 37/95

As **Thursday 7 September** is a Holiday (Jeûne genevois), material for publication in Weekly Bulletin No 37/95, to appear on Friday 8 September (covering the week of Monday 11 September) should reach us **one day earlier than usual, i.e. by noon on Monday 4 September**.

Thank you for your cooperation.

Media & Publications
Tel. 3475

SERVICE RESTREINT AUX RESTAURANTS : JEUNE GENEVOIS

Le jeudi 7 septembre 1995 les restaurants, cafétérias et kiosques seront tous fermés à l'exception du restaurant no. 1 ainsi que sa cafétéria (COOP - bâtiment 501 - Meyrin) qui assureront un service restreint de 08h00 à 21h00. Des repas chauds seront servis de 11h30 à 14h00 et de 18h00 à 19h30.

Pour des raisons techniques, le restaurant no. 2 (DSR - bâtiment 504 - Meyrin) restera fermé vendredi 8 septembre, de même que le bar et le kiosque qui en dépendent. Ils reprendront leurs activités selon l'horaire habituel lundi 11 septembre 1995.

Les autres restaurants, cafétérias et kiosques fonctionneront normalement dès le vendredi 8 septembre.

Comité de Surveillance des Restaurants
Tél. 7551

LIMITED RESTAURANT SERVICE : "JEUNE GENEVOIS"

On Thursday 7 September 1995 all restaurants, cafétérias and kiosques will be closed except for restaurant no. 1 and its cafétéria (COOP - building 501 - Meyrin) which will provide a limited service from 8h00 to 21h00. Hot meals will be served from 11.30 to 14.00 hrs and from 18.00 to 19.30 hrs.

For technical reasons, restaurant no. 2 (DSR - building 504 - Meyrin) and its bar and kiosque will remain closed on Friday 8 September. They will resume their normal activities on Monday 11 September 1995.

The other restaurants, cafétérias and kiosques will offer their normal service as from Friday 8 September.

Restaurant Supervisory Committee
Tél. 7551

L'ALLEMAGNE AU CERN

Du 12 au 14 septembre 1995
Hall du Bâtiment de
l'Administration
Bât. 60 – rez-de-ch. et 1^{er} étage
09h00-17h30

Quarante-cinq entreprises allemandes présenteront leurs offres de produits et services pour la construction du grand collisionneur de hadrons (LHC) et les autres programmes clefs du CERN. En outre, deux instituts de recherche, DESY et GSI, présenteront des technologies médicales.

La présentation officielle allemande est placée sous les auspices du Ministre fédéral de l'éducation, de la science, de la recherche et de la technologie (BMBF) à Bonn.

La présentation est parrainée par le Ministère fédéral de l'économie à Bonn, en coopération avec la Confédération allemande des foires commerciales et des expositions industrielles (AUMA) à Cologne.

Vous trouverez ci-après :

- la liste des exposants (qui figurent également, ainsi que leur adresse et programme, dans l'édition du Courrier CERN de juillet-août, sauf DESY, FTK, Heinzinger, Plein&Baus, Spinner et Wälischmiller),
 - 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, bâtiment 33
 - à l'exposition même.

GERMANY AT CERN

12-14 September 1995
Administration Building
Bldg 60 – ground and 1st floor
09.00 to 17.30 hrs

Forty-five German companies will be demonstrating their supplies and services offered for the construction of the Large Hadron Collider (LHC) and other key CERN programmes. Furthermore, two research institutes, DESY and GSI, will be displaying exhibits on medical technology.

The official German presentation is under the patronage of the Federal Minister of Education, Science, Research and Technology (BMBF), Bonn.

The presentation is sponsored by the Federal Ministry of Economics, Bonn, in cooperation with the Confederation of German Trade Fairs and Exhibition Industries (AUMA), Cologne.

There follows :

- the list of exhibitors (also published with their address and programme in the July-August edition of the CERN Courier, all but DESY, FTK, Heinzinger, Plein&Baus, Spinner and Wälischmiller),
- the list of lectures to be given at the exhibition.

A detailed programme will be available in due course at :

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

LISTE DES EXPOSANTS / LIST OF EXHIBITORS

- | | |
|---|---|
| 1. Accel Instruments GmbH | 28. Messer Griesheim GmbH |
| 2. AFT – Advanced Ferrite Technology GmbH | 29. Noell GmbH |
| 3. apra-norm Elektromechanik GmbH | 30. Optikzentrum NRW |
| 4. Babcock Rohrleitungs-Bau GmbH | 31. Elcotron SA (CH) representing: |
| 5. Balzers-Pfeiffer GmbH | 31.1 Plein & Baus GmbH |
| 6. Bestec GmbH | 32. Saskia Hochvakuum-und Labortechnik GmbH |
| 7. Crystal GmbH | 33. Schott Glaswerke Optics Division |
| 8. DESY – Deutsches Elektronen-Synchrotron | 34. Hans Skodock GmbH |
| 9. Elekluft | 35. Spindler & Hoyer GmbH |
| 10. FTK Funktechnik Köpenick GmbH (Rohde & Schwarz) | 36. Spinner GmbH Elektrotechnische Fabrik |
| 11. F. u. G. Elektronik GmbH | 37. Stahlkontor GmbH + Co. KG |
| 12. GA – Gesellsch. für elektrische Anlagen Elektrobau GmbH | 38. Statron-elektronik GmbH |
| 13. Gerland Mikroelektronik | 39. Dr. Bernd Struck |
| 14. GMS – Gesellschaft für Mess- und Systemtechnik mbH | 40. Vacuumschmelze GmbH |
| 15. GSI – Gesellschaft für Schwerionenforschung mbH | 41. Vero Electronics GmbH |
| 16. Hartmann & Braun AG | 42. Von Ardenne Anlagentechnik GmbH |
| 17. EG & G Heimann Optoelectronics GmbH | 43. Hans Wälischmiller GmbH |
| 18. Heinzinger electronic GmbH | 44. Wes-Crates GmbH |
| 19. H E W – Kabel H. Eilentropp GmbH & Co. KG | |
| 20. ILK Dresden – Institut für Luft- und Kältetechnik | |
| 21. Integral Energietechnik GmbH | |
| 22. Kabelmetal Electro GmbH | |
| 23. KCH – Keramchemie GmbH | |
| 24. Leybold Vakuum | |
| 25. Linde AG Werksgruppe VA München | |
| 26. Logotron AG (CH), representing: | |
| 26.1 Hameg Instruments | |
| 26.2 Hera | |
| 26.3 IMK – Innovative Messtechnik Krenz | |
| 26.4 Siemens | |
| 27. MAZ – Mikroelektronik Anwendungszentrum Hamburg GmbH | |

EXPOSITION ORGANISEE PAR / EXHIBITION ORGANIZER

BMBF	DEGA Expoteam GmbH & Co
Bundesministerium für	Ausstellungs KG
Bildung, Wissenschaft,	Dorfstrasse 43
Forschung und Technologie	D 82418 Riegsee
Heinemannstrasse 2	Claudia Honigmann
D – 53170 Bonn	Tel. (+49 88) 41 20 05/96 60
Dr Michael Stötzel	Fax (+49 88) 41 9 91 66
Tel. (+49 228) 57 34 03	
Fax (+49 228) 59 36 03	

Information : M. Diraison / FI / 4585

GERMANY AT CERN '95 (12-14 September)
Lecture programme – Council Chamber, bldg. 503

Tuesday 12 September

Accelerator Technology / Medical Technology

- 14.00 Industry as a partner for CERN. Performance and results of the joint development of Superconducting Prototype Dipole Magnets for the LHC
by Dr. F. Eysselein, Noell GmbH
- 14.30 Accelerator and Magnet Technology - Supply and Service from ACCEL I
by Dr. Hans-Udo Klein, Accel Instruments GmbH
- 15.00 Saskia Highvacuum - A company of vacuum technology from Thuringia (developments, products, goals)
by Dr. H.-D. Bürger, Saskia Hochvakuum-und Labortechnik GmbH
- 15.30 Messer Griesheim - Partner for gases & cryogenics
by Dr. Ewald, Messer Griesheim GmbH
- 16.00 Know-how from fabrication and installation of the DESY HERA Helium Transfer Line
by Dipl.-Ing. Rainer Gnirke, Babcock Rohrleitungs-Bau GmbH
- 16.30 High-performance circulators and tuner
by Dr. Wolfgang Arnold, Advanced Ferrite Technology GmbH
- 17.00 Noninvasive coronary angiography with Synchrotron Radiation - The Project NIKOS at DESY/HASYLAB
by Prof. Dr. Jochen Schneider, DESY/HASYLAB

Wednesday 13 September

**Accelerator Technology/Detector Technology/
Medical Technology**

- 10.00 Professional design of complex UHV-systems for research adapting to its actual trends
by Dr. Christian Rempel, Bestec GmbH
- 10.30 Biophysics and tumor therapy with ion beams at GSI
by Dr. Günter Siegert, GSI
- 11.00 Laser Alignment System with Transparent Strip Sensors
by Dr. Kroha, Max-Planck-Institut für Physik, München / EG & G Heimann Optoelectronics GmbH
- 11.30 Applications of Crystal in X-Ray Detectors and Frequency Doubled Laser Diodes
by Mr Klaus Schwenkenbecher, Crystal GmbH
- 12.00 Custom-made systems in the field of precision optics, mechanics and laser technology
by Dr. Rainer Schuhmann, Spindler & Hoyer GmbH

Electronics, Instruments

- 14.00 Applications of DSP based Data Acquisition in Particle Physics
by Mr Ludwig Christians/Dr. Bernd Struck
- 14.30 Distributed ATM-based Corporate Networks
by Dr. Kerstin Uhde, MAZ - Mikroelektronik Anwendungszentrum Hamburg GmbH
- 15.00 KCH - special coatings, high-chemical-resistant and decontaminatable (lecture in German)
by Mr Ostrowski, Keramchemie GmbH
- 15.30 High-performance Cooling with latent energy
by Dr. -Ing. Joachim Paul, Integral Energietechnik GmbH
- 16.00 The Abrasive High-Pressure Water-Jet and the Laser Beam as tools in an Industrial Cutting Service
by Mr J. Putsch, Stahlkontor GmbH + Co. KG
(optional: Mr W.Rietz)
- 16.30 RF - High Power Transmission - Systems and Components
by Dr. Ing. Franz X. Pitschi, Technical Director, Spinner GmbH Elektrotechnische Fabrik

Thursday 14 September

Purchasing at European Research Institutions

- 09.00 The Formal Rules and Procedures which govern purchasing at the ESRF.
More practical aspects of how companies can optimise their possibilities of being ESRF suppliers.
Review of higher value purchases to be made by the ESRF in the following 12 months.
by Robert Freeman, ESRF, European Synchrotron Radiation Facility, Grenoble/France
- 09.30 ILL's contacts with German industry
by Brian Donnelly, ILL, Institut Max von Laue - Paul Langevin, Grenoble/France

Electronics

- 10.00 Power amplifier for accelerators
by Mr Wolf, FTK Funktechnik Köpenick GmbH (Rohde & Schwarz)
- 10.30 A new Generation of Computer Controlled Power Supplies offering high Power Density and high Efficiency.
by Dr Lohr, Heinzinger electronic GmbH

Information: M.Diraizon / FI-A / 4585

HEALTH INSURANCE AT CERN IN 1994

The results of the operation of the health insurance scheme with AUSTRIA for 1994 have been reviewed by the CERN Health Insurance Supervisory Board (CHISB) * and the following tables and graphs show how the scheme is evolving.

1. Number of members of the scheme

	1988	1994
Members of Personnel	4275	3944
Dependants	7300	6096
sub-total	11575	10040
Pensioners	817	1331
Dependants	612	1182
sub-total	1429	2513
Total insured persons	13004	12553

The number of staff members and their dependants is gradually declining, while the number of pensioners and their dependants is increasing.

The declining ratio of active to retired members is a direct result of the policy of the Organization to reduce total staff numbers and the ratio of active to retired persons is a reflection of the fact that as CERN is now 40 years old many previous staff members have reached ages beyond 65 years of age and retired, accentuated however by those staff

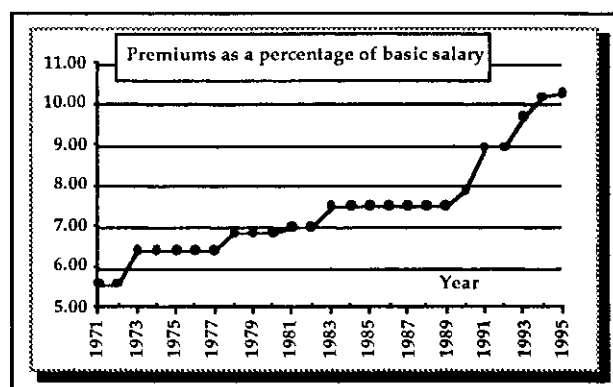
members who retire earlier for various reasons (e.g. early retirement schemes or encouragements, invalidity, illness).

The above policy to reduce total staff further results in active Staff Members also becoming older on average, 52% being above 50 years of age at the end of 1994 compared to only 37% at the end of 1988.

2. Premiums increase with time

The increase in premiums with time is due to the effect of several reinforcing factors.

Until about 1981, the premium formula in the contract with AUSTRIA produced surpluses of premiums over reimbursements. For 1983 to 1985, the premium was also fixed at a value slightly higher than necessary to produce equilibrium between premiums and reimbursements and this also produced surpluses. These surpluses were used between 1985 and 1990 to maintain premiums constant despite increasing reimbursements. As of 1990, there were no longer any surpluses left and the premiums had to be strongly increased to reflect the real levels of reimbursements.



The natural effect of ageing of staff also leads to an increase of about 3% per year in cost per insured person over and above the normal increase of health costs. As of 1985 or so, the number of retired persons compared to active staff also began to be significant and was accentuated after 1988 by early retirement schemes and this also reinforced the increases necessary in premiums. Finally, as premiums are expressed as a percentage of basic salaries, if the latter are not increased in line with the annual adjustment formula or inflation as has been the case recently, this also accentuates the upward movement of premiums.

Along with the normal increase in health care costs, these other factors have combined to produce the more rapid rise of premiums in the recent past compared with the beginning of the scheme with AUSTRIA and will continue to have the same effect in the future.

3. Reimbursements per year

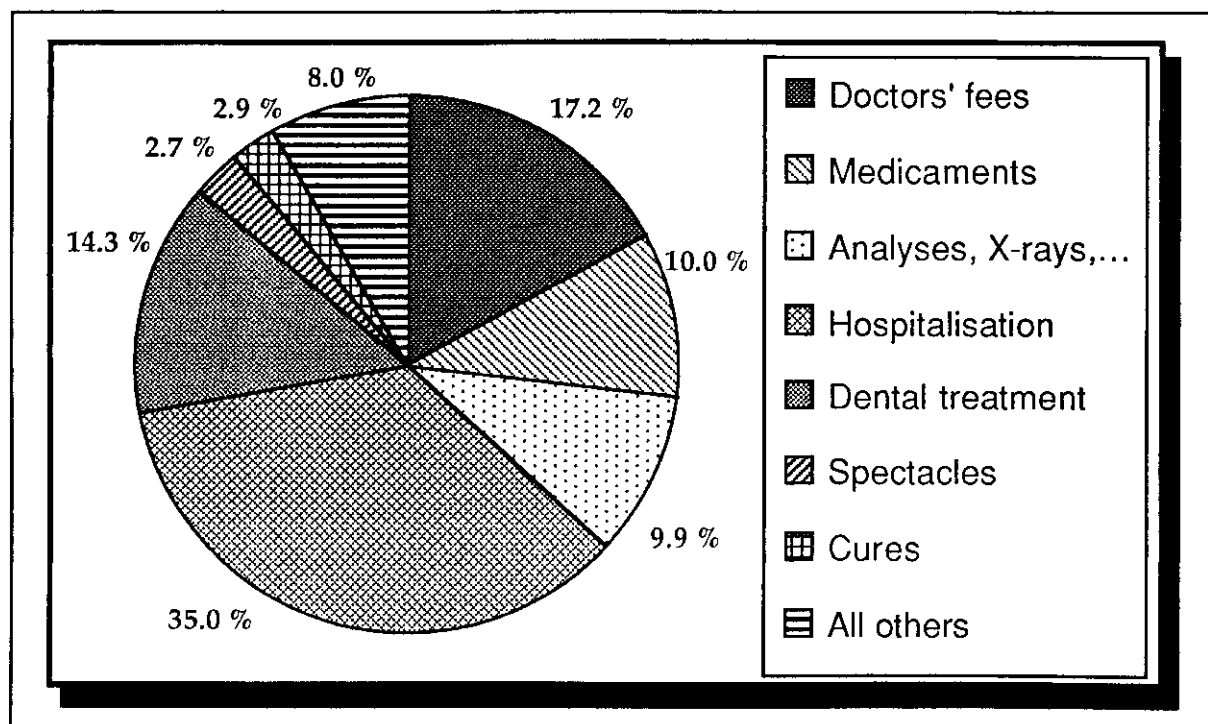
	Total yearly reimbursements millions Swiss francs
1988	21.05
1990	26.01
1992	32.36
1993	32.62
1994	34.09

In 1994 the average reimbursement per insured person was 2 936 CHF. The increase of total costs is about 8.2% per year over the period 1988 to 1994. In a report to the CCP and the Management Board during 1995, the increase in costs per person broken down by age group was shown to be about 7.7% over a ten year period and this compared well with the Swiss average figure of 7.3% per year per insured person. However, for the reasons mentioned in the previous section, the total reimbursements increased more rapidly than this

despite the fact that the number of insured persons actually declined over the period in the table.

* The CHISB is a joint sub-group of the CCP; members for the Administration were H. Atherton and M. Baboulaz; members for the Staff Association were M. Aymon and D. Ball; permanently invited observers for the CERN pensioners were R. Budde and J. Tremblay.

4. Distribution of costs by type in 1994



The major share of the costs is for hospital care and doctors' fees. In the hospital costs are included all treatment including doctors' fees for those interventions in hospitals as well as costs of rooms and operating theatres, etc.

Hospitalisation now represents 35% of the total compared to only 20% in 1988 and demonstrates the very strong increase of costs in this area compared to the others.

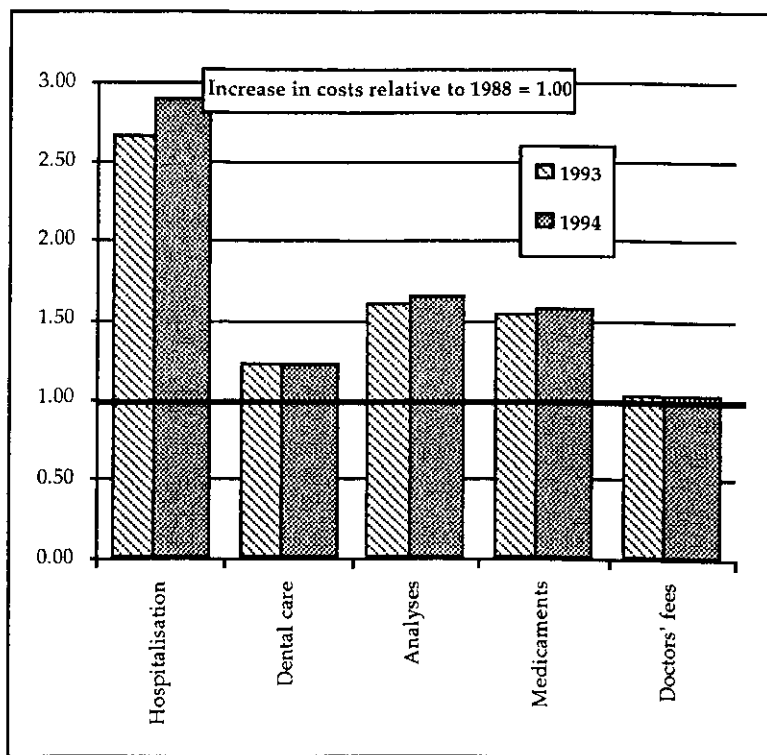
5. Increase in costs over the last 2 years referred also to 1988

Between 1990 and 1991, AUSTRIA changed its accounting procedures so that doctors' fees for interventions in hospitals are included in hospitalisation costs whereas before they were accounted separately into 'doctors' fees' class.

This makes the direct comparison more complicated, however, it is clear that hospitalisation costs have outstripped the other areas of increase. This is the reason for trying to negotiate with hospitals to influence the tariffs. The agreement with the La Tour hospital which has been in existence for more than 10 years, is particularly important as it has the lion's share of CERN's hospitalisations (of the order of 50%).

Between 1993 and 1994:

- hospitalisation costs **increased** by 8.5%;
- AND
- analyses, X-rays **increased** by 2.4%;
- medicament costs **increased** by 2.7%;
- BUT
- doctors' fees **decreased** by 0.5%;
- dental care also **decreased** albeit only by 0.1%.



As hospital costs are the major fraction of the total and the increase in this area is much larger than in others, it was this which dominated the total increase of 1994 versus 1993. Without this large increase in hospital costs, the total yearly increase would have been very modest.

The reason for this relatively strong increase in hospital costs can be traced largely to losing the preferential tariff in the Geneva cantonal hospital as a result of the cancellation of the contract with INTRAS insurance which was itself a result of changes in Swiss law. The effect of this loss was an extra cost to CERN insured persons of about 1 million Swiss francs in 1994.

6. Conclusions

- i) **The CERN health insurance scheme operates as a mutuality** and it is important that all insured members take care to minimise costs so that they do not become too heavy a burden to the community. Beneficiaries should remember that they pay via premiums, the franchise and the fact that reimbursement is in general only 90%, about 50% of the total cost out of their own pockets and hence they have a direct interest in containing costs.

Insured persons can contribute to this aim directly by questioning with their doctors the necessity of treatments given, for example needless X-rays or over medication, by using the preferential providers and by seeking treatment and medicaments in France where possible. AUSTRIA could also be informed if the charges made are considered to be excessive so that they may question them with the doctor or other provider.

- ii) **Costs at the moment are relatively light** as we are still medically speaking a comparatively young insured population. This will continue to change as larger numbers of present active staff take retirement and the Organization reduces the number of active staff in the future notably as a result of decisions related to the agreement to construct the LHC.

This change in the ratio of 'young' staff to retired members would mean moderately increased costs due to the natural ageing of the insured population.

However the effect will be more dramatic as CERN does not contribute directly for pensioners in the same way as it does for staff. This lack of income must be paid by the insured population and will lead to strong increases in the future premiums. This problem was again recently emphasised by the CHISB in reports to the Standing Concertation Committee, the Management Board and the Governing Board of the Pension Fund and it appears that the Organization is now fully cognisant of the problem and is looking urgently to find a solution.

- iii) The result of only 4.5% increase in 1994 over 1993 was gratifying and one hopes this slow down will be maintained in the future. As pointed out in the text the increase would have been all the more modest if we had not lost the preferential tariffs in the Geneva cantonal hospital.

Basic salaries were adjusted by only 0.39% at the beginning of 1994 instead of the calculated value of 1.2% and this meant that the premium rate had to be increased from 9.69% of basic salaries in 1994 to 9.77% in 1995 (excluding the 0.5% of basic salaries paid entirely by the Organization for coverage of costs of professional illnesses and accidents).

- iv) During 1994, the contract with AUSTRIA was extended to run until the end of 1999 with a proviso that AUSTRIA improve its information storage and treatment so that more detailed information will be available to the CHISB to help it in its task of supervision and its aim of better controlling the inevitable increase in health care costs over the coming years.

RESTAURANTS

Plats conventionnés (déjeuner) semaine du 28 août

Fixed price main courses (lunch) week of 28th August

	No 1 - COOP Bât. 501 - Site Meyrin	No 2 - DSR Bât. 504 - Site Meyrin	No 3 - Gén. de Rest. Bât. 866 - Site Prévessin		No 1 - COOP Bldg. 501 - Meyrin Site	No 2 - DSR Bldg. 504 - Meyrin Site	No 3 - Gén. de Rest. Bldg. 866 - Prévessin Site
Lundi-vendredi Samedi Dimanche	Heures d'ouverture: 07h00 - 01h00 07h00 - 23h00 07h00 - 23h00 Repas servis: 11h30-14h00 18h00-20h00 Prix (FS): a) 7.00 FS b) 8.30 FS	Heures d'ouverture: 06h30 - 18h00 Fermé Fermé Repas servis: 11h30-14h00 Prix (FS): a) 7.60 FS b) 8.70 FS	Heures d'ouverture: 07h00 - 18h00 Fermé Fermé Repas servis: 11h30-14h00 Prix (FF): a) 21.50 FF b) 25.00 FF	Monday-Friday Saturday Sunday	Opening times: 07h00 - 01h00 07h00 - 23h00 07h00 - 23h00 Meals served: 11h30-14h00 18h00-20h00 Prices (CHF): a) 7.00 CHF b) 8.30 CHF	Opening times: 06h30 - 18h00 Closed Closed Meals served: 11h30-14h00 Prices (CHF): a) 7.60 CHF b) 8.70 CHF	Opening times: 07h00 - 18h00 Closed Closed Meals served: 11h30-14h00 Prices (FRF): a) 21.50 FRF b) 25.00 FRF
Lundi	a) Filet de St-Pierre à l'orange Pommes nature Courgettes b) Émincé de porc au curry Riz sauvage Petits pois	a) Saucisse de lapin poêlée à la graine de moutarde Pommes mousseline Salade verte b) Carré de porc en croûte Pommes rissolées Ratatouille provençale PIZZA "LA VRAIE"	a) Oeufs durs à la basquaise Épinards à l'ail b) Steak de bœuf grillé aux fines herbes Pommes frites Tomate au four	Monday	a) Fillet of John Dory with orange Boiled potatoes Courgettes b) Curried sliced pork Wild rice Peas	a) Fried rabbit sausage with mustard seeds sauce Mousseline potatoes Green salad b) Loin of pork baked in pastry - Fried potatoes Provençal vegetables PIZZA "THE REAL ONE"	a) Hard-boiled eggs in Basque style Spinach with garlic b) Grilled beef steak with fine herbs French fried potatoes Baked tomato
Mardi	a) Anneaux de calamars Spaghetti Salade verte b) Cordon bleu de porc Pommes mousseline Choux-fleurs	a) Filet de merlan pané Pommes nature Salade verte b) Rôti de bœuf à la bordelaise Pâtes au beurre Jardinière de légumes PIZZA "LA VRAIE"	a) Filet de poisson pané au citron Choux-fleurs b) Pintade rôtie à la forestière Gratin de pommes de terre Petits pois à la française ENTRECÔTE GRILLÉE	Tuesday	a) Squid rings Spaghetti Green salad b) Pork "Cordon Bleu" Mashed potatoes Cauliflower	a) Breaded whiting fillet Boiled potatoes Green salad b) Braised beef with red wine sauce Buttered pasta Assorted vegetables PIZZA "THE REAL ONE"	a) Breaded fillet of fish with lemon Cauliflower b) Roasted guinea fowl with mushroom sauce Baked sliced potatoes in cream sauce French style peas GRILLED SIRLOIN STEAK
Mercredi	a) Sauté d'agneau Flageolets Carottes b) Sauté de bœuf Spirettes Tomate	a) Poule au pot sauce suprême Riz pilaf Salade verte b) Steak haché d'agneau sauce piquante Pommes lyonnaises Haricots verts à l'ail PIZZA "LA VRAIE"	a) Jambon fumée à la bordelaise Côtes de bettes b) Paleron de bœuf braisé Semoule Carottes à la vapeur CHOIX DE SAUCISSES GRILLÉES	Wednesday	a) Lamb stew White beans Carrots b) Beef stew Spiral noodles Tomato	a) Boiled hen sauce suprême Pilaf - Green salad b) Hamburger of lamb with spicy sauce Fried potatoes with onions Green beans with garlic PIZZA "THE REAL ONE"	a) Ham in Bordeaux style Sliced Swiss chard b) Braised beef Couscous Carrots CHOICE OF GRILLED SAUSAGES
Jeudi	a) Paupiette de dinde Cornettes Courgettes b) Côte de porc charcutière Pommes en dés Broccoli GRATIN DE SAUMON	a) Cannelloni gratinés Salade verte b) Brochette de dinde Pommes sautées Choux blancs au lard PIZZA "LA VRAIE"	a) Poitrine de veau farcie sauce aux champignons Choux de Bruxelles aux oignons frits b) Sauté de porc à la provençale Papillons au beurre Courgettes sautées TRUITE MEUNIÈRE	Thursday	a) Turkey slice Pasta Courgettes b) Pork chop Sautéed potatoes Broccoli BAKED SALMON WITH POTATOES & SPINACH	a) Cannelloni au gratin Green salad b) Turkey on skewer Sautéed potatoes White cabbage with bacon PIZZA "THE REAL ONE"	a) Stuffed breast of veal with mushroom sauce Brussels sprouts b) Pork stew in Provence style Buttered pasta Sautéed courgettes TROUT
Vendredi	a) Steak de bœuf haché Pommes boulangères Haricots verts b) Dame de cabillaud Pommes nature Ratatouille	a) Pipersade basquaise Pommes frites Salade verte b) Assiette du pêcheur Riz aux légumes Tomate au basilic PIZZA "LA VRAIE"	a) Rognons de bœuf à la crème Macédoine de légumes b) Aile de raie à l'antillaise Endives	Friday	a) Minced beef steak Baked sliced potatoes Ratatouille b) Slice of cod Boiled potatoes Ratatouille	a) Omelette basque style Pommes frites Green salad b) Sea fisherman's plate Rice with vegetables Tomato with basilic PIZZA "THE REAL ONE"	a) Sliced beef kidneys in cream sauce Diced vegetables b) Wing of skate in Antilles style Rice Chicory

INFORMATION

Les informations paraissant sous cette rubrique sont publiées sous la seule responsabilité de l'Association du personnel du CERN.

Association
du personnel
CERN

Staff
Association
CERN

STAFF_ASSOCIATION@MACMAIL.CERN.CH

The information presented under this heading is published under the sole responsibility of the CERN Staff Association.

Original French 17 August 1995

ORDINARY MEETING OF THE STAFF COUNCIL, 8 AUGUST 1995

The meeting opened at 14.30, and elected Marcel Aymon as chairman.

Activities of the Executive Committee

Schedule of future major meetings

9 August: meeting of Standing Concertation Committee, SCC, to discuss the documents for the next meeting of the CERN Tripartite Employment Conditions Forum, TREF. These documents concern the Revision of the Staff Rules and Regulations, SR&R, the Remuneration Review for both Staff Members and Fellows, and Health Insurance.

25 August: mini-sessions of the Association to discuss the triennial actuarial study of the Pension Fund.

29 & 30 August: TREF meeting.

5 September: SCC meeting.

6 September: Meeting of the Governing Board of the Pension Fund to consider, amongst other matters, its comments on, and the consequences of, the actuarial study.

Revision of the SR&R

This revision is advancing well. In particular, we would draw your attention to a proposal concerning social protection which results from the initiative of the Association. In line with our position given in the PROTON 95, it

will be the Director General who will have the initiative in proposing the level of benefits, which today is not the case for pensions.

It is also proposed to mention in the SR&R the right of pensioners to remain members of the CERN scheme safeguarding them against the economic consequences of illness and accidents.

TREF will also proceed to a second reading of texts which it has already examined and a first reading of texts concerning, taxation, social insurance coverage and limitation of claims.

In reply to a question as to the interpretation of "*dismissal for reasons of unsatisfactory service*" [which replaces the existing "*dismissal for other specified reasons related to the exercise of functions*"], the Staff Council took note that the Administration intends to publish in good time a text explaining the main modifications made the SR&R.

Five-yearly remuneration review of staff members

The collection of data for comparing CERN with other employers is well advanced, and a written report is being produced for TREF. However the Executive Committee considers that some of the data still needs verifying. It has also requested clarification of the method used for the comparison with high technology industry. The Staff Council will hold a special meeting after the TREF meeting to study the results.

Remuneration review of fellows

The Administration has quickly collected data for comparison with ESA, EMBL, ESO, DESY, European Union and the University of Geneva. The Executive Committee considers that a considerable amount of checking should be done before sending a document to TREF.

Health Insurance

As a reminder members of the personnel pay 35% of the total contribution, based on their salary, and the Organization pays the remaining 65%. Pensioners who remain insured by Austria also pay the same percentage, calculated on a maximum pension corresponding to 35 years of service, but the Organization does not pay directly for them. Since 1991, the SCC has unanimously recommended that the Organization pay also the remaining 65% for the pensioners, but to no effect. This recommendation has been endorsed again this year, and discussions have taken place with the Management to ensure that this time it is followed.

The Staff Council has **voted unanimously** to ask that the Organization pay this contribution as from next year, in which case it will study different ways of reducing the overall costs.

It has also discussed whether or not the insurance against professional risks should be separated from the rest of the health insurance, in particular if the Organization wishes to reduce its present contribution of 0.5% of the basic salaries.

Annual adjustment of students' allowances

Students receive a subsistence allowance calculated as a percentage of the CERN subsistence allowance for Switzerland. This subsistence allowance is the standard rate used by the United Nations. At present the students' allowance is adjusted yearly, in line with the annual adjustment of the United Nations subsistence allowance.

The Management has proposed to modify this procedure and to leave this annual adjustment to the discretion of the Director General, and has asked for the view of the Staff Association. The Staff Council has **unanimously adopted** the proposal of the Executive Committee that the adjustment should not be left to the discretion of the Director General, but should either be adjusted in line with salaries or in line with the subsistence allowance.

Modifications to the Statutes of the Association

The Staff Council **has approved** the following changes proposed by the Executive Committee:

- Article 24 defining the quorum for the purposes of voting (with 3 abstentions),
- Article 29 (b) defining the composition of the Executive Committee (with 2 votes against and 5 abstentions).

These articles will be submitted for final approval to the General Assembly of the Association to be held on **12 October (note revised date)**.

PROTON 95 – Reaction of the personnel

The Members of the Council have reported the reaction of their colleagues to this PROTON. It appears that some may not have received it, and the Executive will check if there were any problems with the distribution.

Additional copies, in English and French, are available from the Secretariat of the Association.

Mini-assizes on the Pension Fund

Friday 25 August the delegates of the Staff Association will examine in detail the actuarial study of the Pension Fund, and will prepare their comments in readiness for the meeting of the Governing Board of the Pension Fund on **6 September**. The Organization of this mini-assizes has been discussed by the Staff Council. The discussion will be continued at a meeting of the enlarged Executive Committee scheduled for **18 August**. The Staff Council hopes that the consulting actuary, the administrator and the members and their alternates of the Governing Board elected directly by the personnel, will be able to attend this mini-assizes.

Industrial Services at CERN

We have already reported on recent changes made by the Finance Committee to CERN's adjudication rules for industrial services contracts¹. Current industrial services contracts must therefore be renewed this year under rules which favour firms from Member States with few or no contracts. Many difficulties have been encountered applying these rules, in particular distant firms do not know, or know very poorly, employment conditions and life in the Geneva region. The Management recognizes that these new rules risk to provoke the loss of staff employed by existing firms, many of whom are essential to run CERN, and disrupt the continuity of services. It is elaborating proposals to remedy these difficulties which it intends to present to the Member States.

The Staff Council has noted with interest these proposals which show that the Management is concerned with stability, at least of the staff of the firms. It would hope that it was equally concerned with the stability of its own staff, which however does not seem to be the case judging from its systematic recruitment of staff on "rotational posts".

The Staff Council gave a favourable welcome to the proposal of the Executive Committee to press for the setting up of a Multipartite Commission comprising representatives of CERN, of the Host States, of the employers and of the staff of the firms. This Commission would be charged with revising the 1965 agreement between CERN, Switzerland and France² and with establishing a collective site agreement which all contractors with CERN would have to obey.

Noting that the Management wishes to retain at least a part of the staff working for firms at CERN, despite possible changes of firms, the Staff Council considers that this objective can most easily be achieved by integrating these personnel with the personnel of CERN. How this should be done is open to discussion. This was the position already adopted by the Staff Council last November following its mini-assizes devoted to these questions.

The meeting closed at 18.00

* * * * *

¹ see bulletin n° 45/94 dated 7 November 1994, "Mini-Assizes 18 October 1994 on CERN's industrial services policy and consequences for present contractors and their personnel".

² according to which the conditions of employment of firm's staff must be those of Switzerland if it is working on the Swiss part of CERN, and those of France if it working on the French part.

IMPORTANT

CHANGEMENT DE DATE

L'Assemblée générale ordinaire de l'Association du personnel a été fixée au

JEUDI 12 OCTOBRE 1995, à 14h.00
Amphithéâtre du Bâtiment Principal

Lors de cette Assemblée nous vous informerons sur la situation des discussions sur les sujets développés dans le PROTON 95.

Nous comptons sur votre présence.

* * *

IMPORTANT

CHANGE OF DATE

The Annual General Assembly of the Staff Association will be held on

THURSDAY 12 OCTOBER at 2.00 P.M.
Main Auditorium

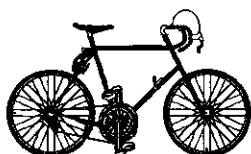
At this AGM you will get an update on how the discussions on all the topics mentioned in PROTON 95 are going.

Don't miss it.

* * *

CLUBS

VÉLO



Prochaines sorties :

SAMEDI 26 AOUT : matin 8h30 ou après-midi 13h30, à vous de choisir. Rendez-vous au parking des drapeaux du CERN pour 87 kilomètres pour une ballade entre "Rhône et Salève", on ne peut aller dans cette direction sans se faire plaisir avec la montée de la Croisette, elle se fera cette fois depuis Cruseilles. Possibilité de retour plus plat pour ceux qui le désirent.

SAMEDI 2 SEPTEMBRE : 14h00, parking des drapeaux du CERN pour 51 kilomètres.

Pour INFO : Toujours des maillots et des gants disponibles dans toutes les tailles.

SKI



GYMNASTIQUE PREPARATOIRE AU SKI

Nos séances de gymnastique débuteront le 19 septembre, à 18h.00 et à 19h.00. Les cartes de participation seront en vente :

JEUDI 14 SEPTEMBRE de 17h.00 à 18h.00
à la Cafétéria du Restaurant No. 2
Bâtiment 504

Aucune carte ne sera vendue à l'avance. Si vous êtes absent ce jour là, veuillez déléguer un ami SVP.

Freddy Streun



SUBAQUATIQUE

ASSEMBLEE GENERALE

JEUDI 14 SEPTEMBRE 1995, à 18h.00
Bâtiment 13 - 2-005

Ordre du jour

- Election du Président de séance
- Rapport du Comité
- Election du nouveau Bureau
- Divers

Inscriptions pour les personnes désirant faire un baptême de plongée.

CHOEUR DU CERN

Les répétitions en vue du Concert de Noël débiteront:

MERCREDI 30 AOÛT 1995, à 20h.30
l'Amphithéâtre du Bâtiment Principal
Bâtiment 60



CROQUET

1995 Swiss championships.

The final stages of the Handicap event took place on Saturday 19 and Sunday 20 August. Dave Underhill had qualified, but was called away on duty travel, being replaced by Ian Sexton.

Semi-finals:

Will Howell beat Peter Payne 26-16 and 26-12,
Ian Sexton beat Mike Gerard 26-19 and 26-15.

Final:

Will took 8 hours to beat Ian 18-26, 26-11 and 26-16, retaining his 1994 title.

The weekend of 26/27th will see the semis and final of both the Advanced and Novices' events.

Spectators are welcome and explanations will be given as play proceeds.

For further information on croquet, please contact :

Ian Sexton (5797) or
Norman Eatough (059 50 41 21 87).

* * *

Les championnats suisses 1995

Les dernières étapes du tournoi Handicap ont eu lieu le samedi 19 août et le dimanche 20. Dave Underhill s'était qualifié, mais devait entreprendre un voyage d'affaires, étant remplacé par Ian Sexton.

Demi finales:

Will Howell bat Peter Payne 26-16 et 26-12
Ian Sexton bat Mike Gerard 26-19 et 26-15.

Finale:

Will a mis 8 heures pour battre Ian 18-26, 26-11 et 26-16; il retient son titre de 1994.

Le weekend du 26/27 verra les demis et finale autant du tournoi Avancé que celui des Novices.

Les spectateurs sont les bienvenus et recevront les explications en cours de jeu.

Pour de plus amples renseignements sur le croquet, veuillez contacter:

Ian Sexton (5797) ou
Norman Eatough (059 50 41 21 87).



SOFTBALL

CERN Softball in First Place!

The CERN Softball Club swept a double-header this Sunday to grab sole possession of first place in the Geneva Slow-Pitch League.

A tight defense and good pitching turned out to be the difference in the afternoon's opener, holding the Marines to only one run in the final four innings and securing an exciting 14-12 victory.

The nightcap turned out to be somewhat less of a thriller, as CERN exploded to an 18-4 lead after four innings and held on to snatch first place from the GOF's, 19-12.

More Action Wednesday

Results from Wednesday's game against the Marines were not in at press time, but rumor has it that the CERN team was heading to the Geneva Marine House with visions of a pennant in their eyes and bandages on their knees.

It is Never Too Late to Join

While the cool winds of Autumn are starting to rustle up the loose leaves, a few of the more intelligent geese are gathering together (before the French can get to them) to plan their southern flights, and Coach Steve is calling up PonTel to order Michigan Football tapes, it is never too late to come out and play ball for CERN.

With HEP conference season in full swing, the team is always ready to welcome a few good ringers. Besides, all members will receive free admission to...

The First Annual CERN Softball Club Benefit BBQ and Blowout

The CERN Softball Club is pleased to announce that on Saturday, September 16th a new tradition will be inaugurated. Yes folks, its the first annual Softball Club Benefit BBQ and Beer Blowout!

In recognition of the team's effort this year, we are planning a gala fete of enormous proportions. Card-carrying CERN club members (that means

those who have paid their dues) will be treated to an evening of authentic BBQ cuisine and barley-based liquid refreshments.

Non-playing members will be able to join for a low fee of 10 CHF per person at the door.

Because of the nature of this event and the required planning of the menu, it will be a strictly RSVP affair. Please contact André Turcot (turcot@vsopb7.cern.ch) by Thursday the 14th September if you plan to attend and if you will be bringing guests. If you would like to volunteer to help in the preparations (greatly appreciated and needed) contact André

Membership

Anyone interested in playing slow-pitch softball on the CERN team should feel free to contact us:

- The World-Wide Web (<http://Softball.cern.ch>)
- Internet News (cern.softball)
- E-mail (Softball@cern.ch)
- Phone (Steven Goldfarb 767-6965)

Dues may be paid via versement slips available at the Post Office in the Main Building. They are:

- | | |
|----------------------|-------|
| • Regular Member | SF 30 |
| • Student Member | SF 15 |
| • Non-Playing Member | SF 10 |

Remember to pay before the Banquet!



GOLF

The golf club's annual outing to the Golf Club of Esery is always rather special. On a beautiful day like last Friday the views from the golf course are breathtaking. However, so too is the speed of the ball across some of the fastest greens in the Rhone-Alpes area. This can lead to players with a more vigorous putting technique ending up with scores which don't necessarily represent their general standard of play. Cases of four putts are not uncommon and three putts are almost the rule. An unconfirmed rumour has it that one of our 51 participants placed his ball immaculately in the middle of the third green, a par 3, then putted back and forth to finish up marking his card with a 7. Generally, the winners of our competitions there are those who most quickly come to terms with the feather like touch required to stroke the ball to the hole. Pam Fernquist proved that when a delicate hand is needed women will always be the best bet and returned an incredible score of 47 stableford points.

All the winners last week were richly rewarded. Thanks to the good offices of M. Dohmé, the Swiss Bank Corporation had generously provided a series of prizes of an excellence to which the members of the golf club are barely accustomed. Our sincere thanks are due to M. Erwin Knupp and the Swiss Bank Corporation for making our outing an outstanding success.

The lucky winners were as follows:

1st brut : Peter Jones, 28 points brut.

Class 1 - Handicaps 0-20		Class 2 - Handicaps 21-35	
1. B. Moy	37 pts	1. P. Lebarbier	41 pts
2. A. Przybyla	37 pts	2. G. McMonagle	39 pts
3. P. Brown	36 pts	3. R. Guyon	37 pts

Ladies	
1. R. Fernqvistr	47 pts
2. R. Mohr	35 pts
3. D. Dard	34 pts

Our next tournament will be the popular outing to Mègeve on **Thursday the 7th September**. Inscriptions should be sent to Pierre Lebarbier, AS division before **Friday the 1st September**.



SKI



Sorties en montagne Automne 1995

Toutes les randonnées organisées par le Ski Club sont à titre bénévole et n'engagent pas sa responsabilité ni celle des organisateurs.

Voici le programme des sorties prévues par le Ski Club CERN.

Mois de septembre

Dimanche 3 septembre

Col du tricot (2120m) dans le Massif du Mont Blanc.

Organisateur : Gérard BRUN

Difficulté (*) : dénivellation 1100m.

Durée totale : 4h.30

Matériel : chaussures de marche obligatoires

Départ : 7h.30 parking de l'entrée principale du CERN (sous les drapeaux).

Samedi 9 septembre

Tête du Colloney (2692m) dans le Chablais.

Organisateur : Gilles-Marie BERARD

Difficulté ()** : dénivellation 1500m.

Durée totale : 7h.00

Matériel : chaussures de marche obligatoires

Départ : 7h.30 parking de l'entrée principale du CERN (sous les drapeaux).

Difficultés :

(*) facile - (**) Moyen - (***) difficile



YACHTING

RAS LE BOL 95

Un très beau rallye à nouveau avec des vents très convenables et quelques bourrasques fortes pour l'arrivée de la régate dimanche après-midi.

Les questions et jeux ont pleinement justifié le nom de cet événement très appréciés par tous les participants, qui adressent encore un grand bravo à toute l'équipe organisatrice.

Grand bravo donc à Dennis, Margot, Marie-Hélène, Renée et Raymond Fawer, Franck Rogner et Jean Simonen.

Félicitations à toutes les équipages et bien sûr aux vainqueurs.

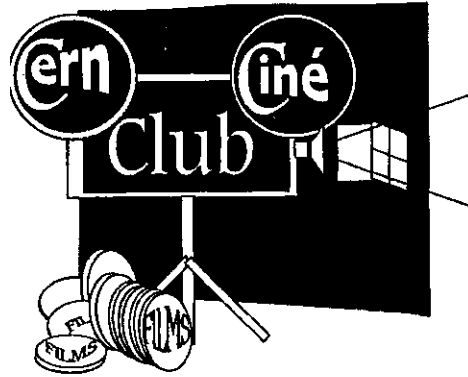
Bateau	Skipper	Crew	Samedi				Dim.	Regate				
			Quest.	Vin	Conf.	Anneaux	Joutes	Temps	Coeff	Pos	Pts	Rang
Yassos	A. Boker	Danielle, I. Urbanec, M. Spiegel, Gino, A. El-etr	98	1	4	1	30	3h.03'52"	0.877	4	177	1
Ydra	W. Rudolph	M. Goerz I. Huber	73	3	2	1	20	3h.20'56"	0.735	1	159	2
Titou	A. Lang	Nicole, Aude et Julien Laverdure	100	1	1	0	10	3h.34'17"	0.746	3	155	3
Apsara	D. Boimond	Françoise Gabriel Georges Caniac	95	2	3	3	25	abandon	0.805	7	148	4
"Comete"	M. Delisle	Daniel Deschenau Monique Zollo	76	1	3	2	10	3h.2'51"	0.826	2	147	5
Lapus	G. Dubail	Frédérique et Déborah Gaillard	87	3	1	1	20	4h.03'0"	0.763	6	140	6
Pussycat	P. Gelissen	Tiny, Lucienne, Christina, Lulu, Marios & Jeanne Petropoulos	89	0	2	4	10	2h.59'7"	0.91	5	122	7

YACHTING

TOMORROW / DEMAIN

**SATURDAY 26 AUGUST 1995
SAMEDI 26 AOUT 1995**

**MONTHLY REGATTA
REGATE MENSUELLE**



JEUDI 31 AOUT 1995, à 20h.30
THURSDAY 31 AUGUST 1995, at 8.30 p.m.

Amphithéâtre Bâtiment Principal / Main Auditorium

THE PLAYER

de/of Robert ALTMAN

avec/with Tim ROBBINS, Greta SCACCHI

1992 USA

Un soir, Griffin Mill, une personnalité en vue de l'industrie cinématographique tue accidentellement l'auteur présumé des lettres anonymes qu'il reçoit régulièrement. Il est soupçonné par la police mais, faute de preuves, il n'est pas inculpé.

Quand il reçoit de nouvelles lettres anonymes, Griffin se rend compte qu'il a tué un innocent et n'en éprouve aucun remords.

Prêt à toutes les compromissions et lâchetés pour assouvir sa soif de pouvoir, il continue sa vie d'homme d'affaire pressé, et va jusqu'à séduire l'ex-amie de sa victime.

"The Player" est une comédie satirique qui donne une description acide du milieu hollywoodien. Les apparitions, dans leur propre rôle, de Cher, Julia Roberts, Nick Nolte, Peter Falk..... apportent une grande crédibilité au film.

One evening Griffin Mill, a well-known personality in the film industry, accidentally kills the suspected author of anonymous letters which he has been receiving regularly. He is suspected by the police, but is not accused because of lack of proof.

On receiving further anonymous letters Griffin realises that he has killed an innocent person but feels no remorse.

Ready for all compromises and despicable acts he continues his life as a busy business man and even goes as far as to seduce his victim's ex-girlfriend.

"The Player" is a satirical comedy which gives an acid description of the Hollywood sphere. The appearances of Cher, Julia Roberts, Nick Nolte and Peter Falk as themselves, brings real-life credibility to the film.

Version originale Anglais sous-titrée Français-Allemand
English dialogue with French and German sub-titles

Entrée/Entrance CHF 8.-

COOPERATIVES

COOPIN

(Bât. 563)

Heures d'ouverture: tous les jours de la semaine de 13h00 à 16h30.

ATTENTION

Le portail "voitures" sera fermé à partir du lundi 4 septembre 1995 pour raison de sécurité du site.

Temporairement, vous serez donc obligés de stationner votre voiture sur les stationnements interne ou externe les plus proches (sans gêner le passage par les barrières magnétiques) et d'utiliser uniquement le passage piétons derrière la guérite.

Nous vous remercions pour votre compréhension et espérons pouvoir vous accueillir bientôt dans de meilleures conditions.

ACTIONS

KODAK jusqu'au 30 septembre

Mini-posters à mini prix : 18x25cm ou 20x30cm pour Frs 4.90 (à partir de négatifs ou dias 135).

BRAUN - sèche-cheveux silencio 1100W, compact pour Frs 24.90 (P.V. Frs 39.-).

YARDLEY - Aftershave lotion "Yardley Original" 50ml à Frs 24.50 + GRATIS : 1 brosse Yardley of London "natural bristle".

CASIO - pensez à la rentrée scolaire en profitant de notre choix de calculatrices scientifiques. Calculatrices graphiques à partir de Frs 116.80 pour le nouveau modèle de poche FX 7300G. Gamme complète jusqu'à la calculatrice graphique CFX 9800G. Egalement TI 85 graphique et HP 48G et 48GX. Nouveauté : HP 38G.

De nouveau en stock :

Anti-Moustique - appareil électronique à modulation de fréquence silencieux (développé en Suisse). Inoffensif pour l'être humain et les animaux. Ne se jette pas; il suffit de changer la pile après environ 1 an d'utilisation.

Gagnez du temps, pensez COOPIN

Association du personnel
35/95-28.08.95

AS-INTERFON

(Bât. 563)

Heures d'ouverture: tous les jours de la semaine de 13h00 à 16h30.

Marché construction CONCEPT A VIVRE

INTERFON vous recommande avec "Concept à Vivre" les prestations suivantes :

Possibilité d'avoir un terrain dans le Pays de Gex et la Haute-Savoie avec la construction d'une habitation en bois de type américain. L'habitation ainsi conçue est fonctionnelle, économique, chaleureuse et intégrée dans son site.

Un grand espace intérieur personnalisé et évolutif. Départ d'un module de base qui peut être agrandi avec les années selon le projet de base.

Excellente isolation, confort, rapidité d'exécution, qualité de l'architecture, font de la maison à ossature bois, un produit adapté à son temps. L'équipe de "Concept à Vivre" est composée d'hommes de l'art et de professionnels expérimentés qui sont implantés dans le Pays de Gex.

GROUPEMENT DES ANCIENS DU CERN

La prochaine permanence du Groupement des Anciens du CERN se tiendra le :

MARDI 5 SEPTEMBRE 1995

de 14h.00 à 17h.00

dans les locaux de l'Association du Personnel
Bâtiment 64 R-010

Les permanences du Groupement des Anciens du CERN sont ouvertes à tous les bénéficiaires de la Caisse de Pensions et à tous ceux qui approchent la retraite.

* * *

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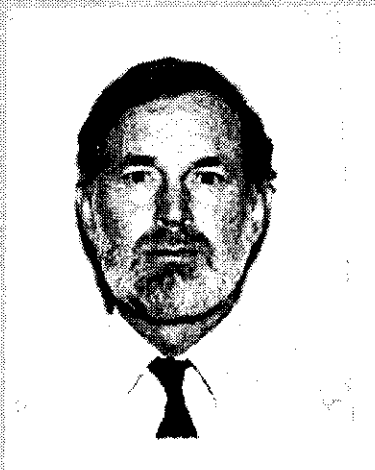
Staff Association

Association du Personnel / CERN CERN / Staff Association

Evening Lectures Series

TUESDAY 5 SEPTEMBER 1995, at 8.30 pm
Main Auditorium

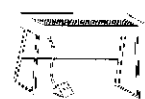
WHERE IN THE UNIVERSE ARE WE ?
Historic and Scientific perspectives



Presented by Philip STOTT

The lecture will be given in English

Open to the public



CERN Hardronic Festival

CERN MusicClub



Free Entrance

August 26th, 16h00

Classical

**Restaurant 3
terrace**

Jazz

Prévessin site

digital

M.C.S



Calendrier hebdomadaire

1995

Weekly Calendar

Lundi Monday 28.8		Mardi Tuesday 29.8		Mercredi Wednesday 30.8		Jeudi Thursday 31.8		Vendredi Friday 1.9	
11.00 E	DETECTOR SEMINAR Coherent Cherenkov radiation of e^+e^- pairs and its application for the measurement of γ -beam polarization by K.A. ISPIRIAN / Yerevan Physics Institute, Armenia			10.00 A	SPECIAL COMPUTING COLLOQUIUM The inside story of C++ What C++ is and why by Bjarne STROUSTRUP				
14.00 C	ISOLDE EXPERIMENTS COMMITTEE Open session			16.00 A	The Standard C++ library : facilities and techniques (<i>continued</i>)				
				14.00 TH	THEORETICAL SEMINAR Gaugino condensation, duality and supersymmetry breaking by Fernando QUEVEDO / University of Neuchâtel			14.00 TH	MEETING ON PARTICLE PHYSICS PHENOMENOLOGY The bormions, an approach to lattice QCD fermion simulations from negative flavour numbers by Roberto PETRONZIO / Università di Roma "Tor Vergata"
		16.30 A	CERN PARTICLE PHYSICS SEMINAR Review of electroweak results from EPS-HEP 95 Conference / Brussels by P. WELLS / CERN			16.30 AT	AC SEMINAR Superconductors and Magnets: Part 1 by Martin WILSON / CERN, AT-MA		
4.9		5.9		6.9		7.9		8.9	
14.00 CN	3 RD INTERACTIVE MIGRATION USER MEETING Electronic Mail Services and User Training by Miguel MARQUINA / CERN	09.00 C	LHCC REVIEW BOARDS (LCRB, LDRB, LERB) Open session						
16.30 A	PPE SEMINAR Electroweak Measurements from D0 by Marcel DEMARTEAU / Fermilab	16.30 A	CERN PARTICLE PHYSICS SEMINAR Evidence for neutrinos oscillations from muon decay at rest by H. WHITE / Los Alamos						

A Auditorium / bldg 500
Amphithéâtre / bât. 500

TH Theory Conference Room / bldg 4
Salle Théorie / bât. 4

DG 6th Floor Conference Room, bldg 60
Salle de conférence du 6e étage, bât. 60

CN CN Auditorium - bldg 31/3-005
Amphithéâtre CN - bât. 31/3-005

Deadline for insertion : Tuesday 12.00 hrs
Staff Association : bldg 64/R-002, tél. 2819
Media & Publications (DSU) : bldg 50/1-030, tél. 3475
e-mail : weekly_bulletin@macmail
staff_association@macmail

C Council Chamber / bldg 503
Salle du Conseil / bât. 503

PS PS Auditorium / bldg 6, 2-024
Amphithéâtre PS / bât. 6, 2-024

S SL Auditorium - Prévessin / bldg 864, 1st fl.
Amphithéâtre SL - Prévessin / bât. 864, 1er ét.

➤ place as indicated
lieu selon indication

E ECP Conference Room, bldg 13/2-005
Salle de conférence ECP, bât. 13/2-005

Dernier délai pour insertions : mardi 12.00 h
Association du Personnel : bât. 64/R-002, tél. 2819
Médias & Publications (DSU) : bât. 50/1-030, tél. 3475