

Des detecteurs de haute sensibilite Un grand "saut de puce"

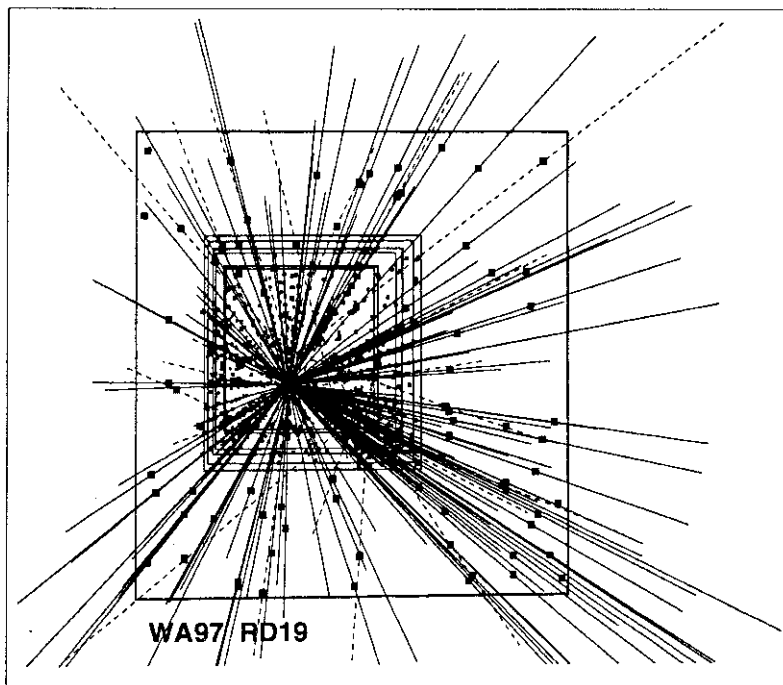
La collaboration RD19 conçoit des detecteurs a pixels hautement sensibles et precis pour les futures experiences LHC. Ces detecteurs fournissent des images en deux dimensions, a resolution temporelle, des evenements de physique. Ils sont constitues d'une matrice de senseurs au silicium reliee par un assemblage du type sandwich a une puce electronique de lecture construite selon les techniques les plus modernes de l'industrie de la micro-electronique. Un tel detecteur a deja ete utilise avec succes dans l'experience WA97 sur les ions lourds.

La derniere en date de ces puces de lecture se nomme Omega 3/LHC1. Elle comporte 800 000 transistors dans une puce d'un peu moins d'un centimetre carre. Ce n'est pas seulement un bijou electronique, mais aussi, lorsqu'elle est associee a un senseur au silicium, un detecteur ultra-precis. Chaque puce est composee de plus de 2 000 cellules de 50 micrometres sur 500 micrometres. Chaque cellule contient son microscopique systeme de lecture electronique. Une particule qui passe au travers d'une cellule arrache aux atomes de silicium des electrons et des trous qui derivent ensuite vers les electrodes collectrices sous l'effet d'un champ electrique. Le signal traverse une minuscule connexion ("bump") et transite dans la partie electronique ou il est amplifie et lu.

Pour pouvoir couvrir des surfaces importantes, plusieurs puces sont reliees par une connexion de type "bump" a une grande puce de detection, ce qu'on appelle une "echelle", et plusieurs echelles sont montees sur une plaque en ceramique. A l'heure actuelle, ces detecteurs a pixels sont capables de detecter des particules avec une precision meilleure que 10 micrometres. Et la precision en temps peut atteindre quatre nanosecondes dans une cellule et pour la puce entiere 35 ns, ce qui est presque suffisant pour le LHC.

High sensitivity detectors New chip off the block

The RD19 collaboration is designing highly sensitive and accurate pixel detectors for the future LHC experiments. Pixel detectors provide time resolved 2-dimensional images of physics events. They consist of a silicon sensor matrix connected in a kind of sandwich with an electronic readout chip taking advantage of the very latest technologies of the microelectronics industry. One such detector has already been used successfully in the WA97 heavy-ion experiment.



Ci dessus, la reconstitution de 153 traces de par Hades nees des collisions d'ions de plomb dans l'experience WA97, grace aux detecteurs pixels.

Above we see the reconstitution of 153 particle traces from lead ion collisions in the WA97 experiment processed by means of pixel detectors.

The latest readout chip to come off the block is called Omega 3/LHC1. It has 800 000 transistors in a chip slightly less than one square centimetre. It is not just an electronic jewel but, when combined with a silicon sensor, it is an ultra-precise detector as well. Each chip contains more than 2 000 cells measuring 50 by 500 micrometres. Every cell has its own microscopic electronic read-out system. A particle traversing a detector cell strips electrons and holes from the silicon atoms which then drift towards the collection electrodes under the influence of an electric field. The signal passes through a minute connection known as a "bump" and into the electronics part, where the signal is amplified and read.

To cover large areas, several chips are "bump-bonded" to one big detector chip, a ladder, and several ladders are mounted on a ceramic plate. At present, pixel detectors allow particles to be detected with an accuracy of greater than 10 micrometres. In terms of time, this precision can reach four nanoseconds in a single cell and 30 ns for a whole chip, nearly precise enough for the LHC.

With the pixel detectors, the electronics and processing of signals are directly integrated in the detector's interior. This allows the signals to be treated instantaneously, instead of collecting all the data and running the analyses afterwards. When the data are selected and analysed on

Avec les detecteurs a pixels, l'electronique, et donc le traitement des signaux, sont directement integres a l'interieur du detecteur. Cela permet de traiter instantanement les signaux au lieu de recueillir toutes les donnees et de faire l'analyse ensuite. Lorsque les donnees sont selectionnees et analysees sur place, par exemple pour un evenement avec une particule de Higgs, le bruit de fond est reduit. Et le traitement devient bien plus simple et plus rapide.

L'objectif est d'enfouir ces detecteurs a pixels au cœeur des experiences ALICE, ATLAS et CMS du futur collisionneur LHC. Des detecteurs de ce type, composes de plusieurs centaines de millions d'elements sensibles, aideront a reconstituer le parcours de plusieurs centaines de particules a partir du point de collision. Ces detecteurs ne seront developpes qu'en "petite" surface au centre des experiences, de trois a quatre metres carres, car leur cout est encore assez eleve.

En attendant leur avenement dans les experiences du LHC, les detecteurs a pixels sont deja utilises au CERN. Iis ont deja opere en 1994 et 1995 dans l'experience WA97, qui etudie les collisions d'ions plomb. Quatre, puis sept plans de 30 centimetres carres (soit un demi-million de cellules a pixels) ont ete places dans l'experience. Conclusion : le detecteur a tenu toutes ses promesses.

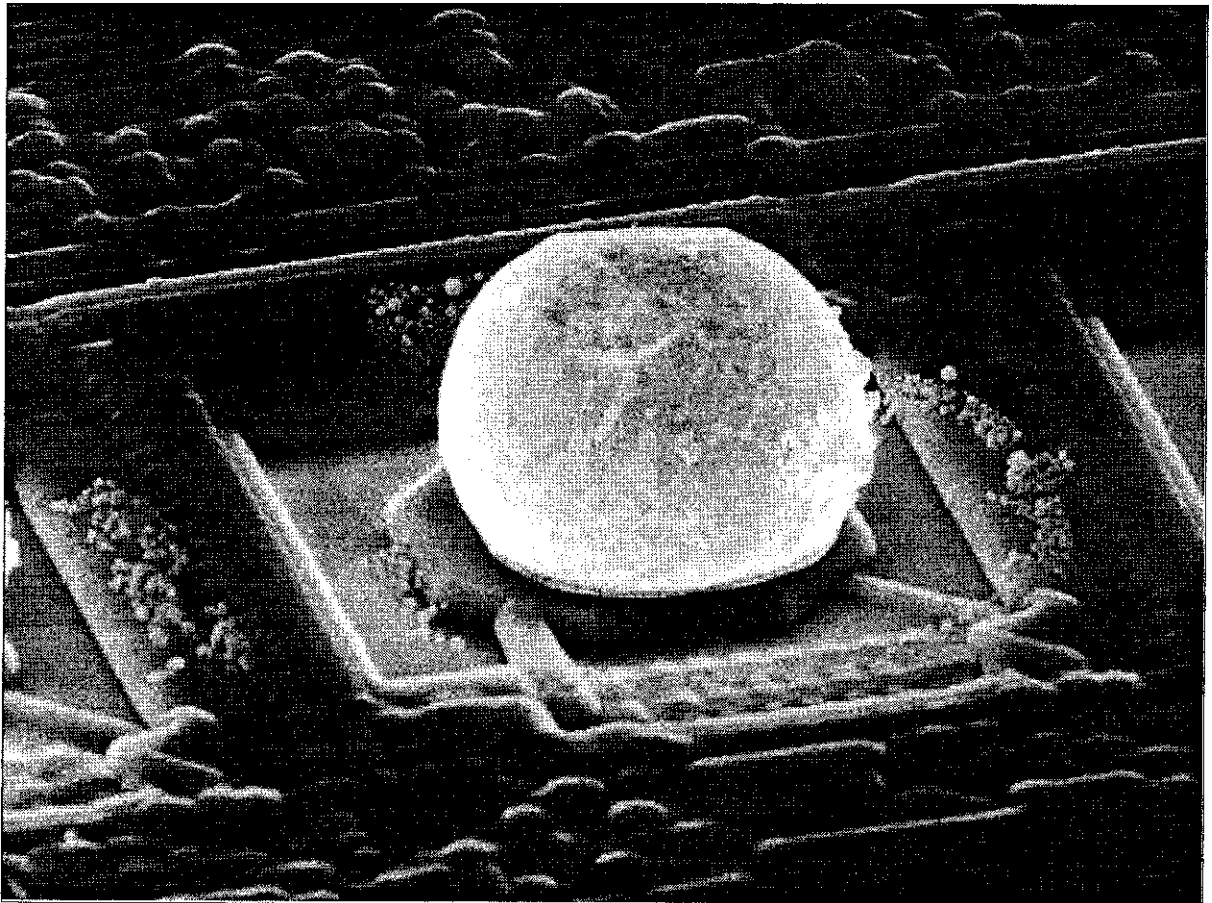
Au-dela de la physique des particules, les applications de tels detecteurs sont prometteuses. On envisage deja de les introduire dans l'imagerie medicale. Iis pourraient produire des cliches par rayons X avec des doses plus faibles qu'aujourd'hui.

the spot, for example for an event involving a Higgs particle, the background is reduced and processing becomes much simpler and faster.

The aim is to bury pixel detectors in the heart of LHC's future ALICE, ATLAS and CMS experiments. Pixel detectors consisting of several hundred million sensor elements will help to reconstitute the flight of hundreds of particles as they move away from the collision point. Because their cost is still quite high the detectors will be developed in only a small three to four square metre area at the centre of each experiment.

Pending their incorporation in the LHC experiments the pixel detectors are already in use at CERN. They were employed as early as 1994 and 1995 in the WA97 experiment which is studying lead ion collisions. First four and then seven 30 cm² of the card-shaped detectors (amounting to half a million pixel cells) were inserted in the experiment, and lived up to expectations.

Outside particle physics too, the applications of the detectors are promising. It is already planned to introduce them into medical imaging. They could be used to produce X-ray photos at lower doses than those used at present, for example.



Les detecteurs sont composees de minuscules cellules sensibles, couplees a des circuits electronicque. Ci dessus, on distingue avec tin microscope electronique une connection de 28 micrometres (millionieme de metre) placee au coeuer du circuit.

The detectors are made up of minute sensitive cells coupled to electronic circuits. Here an electron microscope reveals a 28 micrometre (millionths of a metre) connection located at the heart of the circuit.

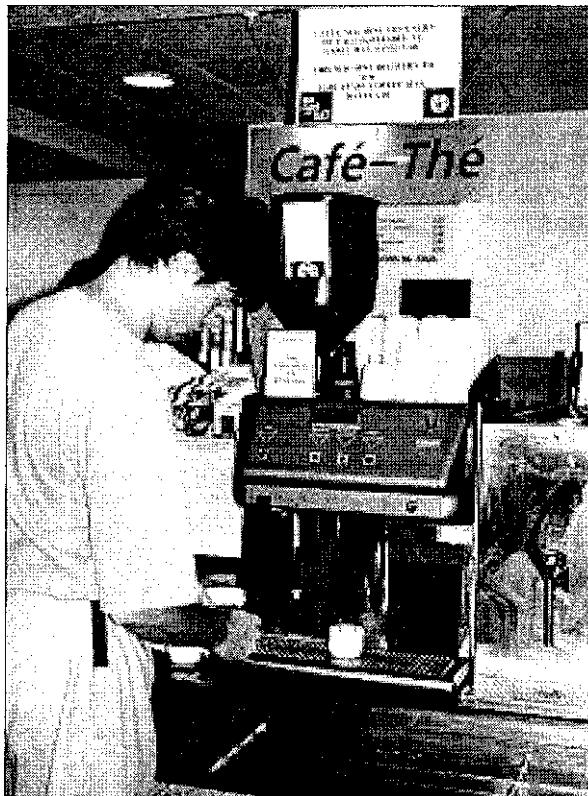
**L'operation commerce
equitable a du succes
aupres du personnel du CERN**

Depuis le 18 juin 1996, le personnel du CERN peut choisir, au restaurant n°1 (COOP), entre deux sortes de cafe et trouver a cote d'un cafe commercialise traditionnellement un cafe au label Max Havelaar pour le commerce equitable. Des le premier jour, 800 personnes ont choisi de prendre le cafe Max Havelaar, ce que Ton peut qualifier de succes.

En pratique, la Fondation Max Havelaar, qui est sans but lucratif, garantit aux producteurs du Sud, petits exploitants regroupes en cooperatives et ouvriers de plantations, des revenus superieurs a des cours mondiaux.

"Un plus pour chacun" : c'est sous cette devise que fut introduit en Suisse, il y a quatre ans, un cafe au label Max Havelaar. Entre temps, la Suisse est devenue le leader europeen du commerce equitable.

La Fondation ne commercialise pas elle-meme les produits certifies qui peuvent etre du cafe, du miel, du cacao, etc. Elle octroie un label aux produits commercialises equitablement et etablit une relation directe entre le commerce Suisse et les organisations de producteurs, eliminant ainsi les intermediaires locaux. Elle conclut alors un contrat de licence qui fixe les conditions d'importation et d'utilisation du label de certification.



*Pour lancer l'operation,
de midi a 14.00 h, le mardi
18 juin, le cafe Max
Havelaar etait offert aux
clients de la COOP.
Pres de 240 personnes
en ont profite.*

*To launch the campaign,
from midday to 2 p.m.
on Tuesday 18 June
Max Havelaar coffee was
offered to Co-op customers
free of charge. Some
240 coffee-drinkers
took up the offer.*

**Fair price coffee
a success with
CERN staff**

For two weeks now, since 18 June, CERN staff have been able to buy fair price coffee under the Max Havelaar label from one of three coffee machines in Restaurant N°1 (the Co-op Canteen), at the same price as the other two machines selling regular commercial coffees. Since the scheme began 800 customers have opted for the Max Havelaar label, so it can be termed a success.

The Max Havelaar Foundation, which is non-profitmaking, guarantees producers in the South, mainly workers in small-scale coffee cooperatives and plantations, better incomes than they would get from the world coffee markets.

"Something extra for everyone" was the slogan used when Max Havelaar label coffee was first introduced into Switzerland, now the European market leader in fair trading.

The Foundation does not itself trade in products it certifies, which include coffee, honey, cocoa and so on. Its approach is to certify that given products are bought and sold equitably, by setting up direct links between Swiss marketing organizations and producer groups. Cutting out the middleman in this way, it draws up licensing contracts that lay down import arrangements and govern the use of the Max Havelaar label.

COMMUNICATIONS OFFICIELLES

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OFFICIAL NEWS

Members of the personnel shall be deemed to have taken note of the news under this heading.

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For information

MANAGEMENT BOARD MEETING OF 25 JUNE 1996

Outcome of **the** June meetings of **the** Scientific Policy Committee, **the** Finance Committee, **the** Committee of Council and **the** Council Session

The Director-General, reporting on the deliberations of the Council¹ and its Committees, said that the main items on the agenda of the Committee of Council had been non-Member State matters, with particular reference to progress in negotiations with the United States with a view to participation in the LEP project, the scope and timetable for the LHC progress review in 1997 and, in closed session, the Management's proposals concerning restructuring in the research, technical and administrative sectors. In addition to matters also dealt with by the Council and its other Committees, the Scientific Policy Committee had heard and expressed satisfaction on an interim progress report by the LHC project leader, L. Evans, on the LHC machine, a status report on LEP by the Director of Accelerators, K. Hübner, and reports on the heavy-ion programme by B. D'Almagne and on the Theoretical Physics Division by the TH Division Leader G. Veneziano, who had emphasized the Division's dual purpose, endorsed by the SPC, as support for the CERN experimental programme and as a European centre of excellence in theoretical particle physics. The Finance Committee, in addition to the items subsequently taken up by the Council on the basis of its recommendations, had heard a presentation by the Director-General on the proposed scope and timetable of the 1997 progress and resources review, and had examined a document concerning the procedure for adjudication of the forthcoming civil-engineering contracts for the LHC project, which it had approved with some amendments. The Finance Committee had also approved a new proposal for the calculation of the CERN materials index which took more account of exchange rate variations and, on the personnel side, had also approved amendments to the Staff Regulations relating to implementation of the first-employment programme and, in the framework of health insurance cost containment measures, the obligation to furnish information in connection with the introduction of new arrangements for contributions to the Health Insurance Scheme.

Non-Member State matters

- Discussions at the June Committee of Council meeting

The Director-General reported on the Committee of Council's discussions on a number of non-Member State matters, with particular reference to India, Canada and the United States. In preparation for a decision by the Council, the Committee had also examined and discussed a draft Resolution concerning the observer status of the former Yugoslavia.

- Outcome of the CERN-US meetings on 24 and 25 June 1996

The Director-General reported on the outcome of the meetings between the CERN Management and representatives of the US authorities which had been arranged to discuss the details of the United States' participation in the LHC project. He informed the Management Board that he would be writing to the Member State delegations to the Council to inform them of developments in that area.

- Russia

The Director-General informed the Management Board that on Friday, 14 June he had signed the Protocol with the Russian Federation concerning participation in the Large Hadron Collider project and that the Minister of Science and Technology Policy of the Russian Federation, B. Saltykov, had subsequently signed the Protocol in Moscow.

- Indefinite Appointment Review and Advancement Exercise 1996

In closed session, D. Plane presented the work and recommendations of the Indefinite Appointment Review Board and J. Ellis those of the Senior Staff Advancement Committee. Both sets of recommendations had been discussed at the Directorate on 16th June 1996. During the ensuing discussions, a number of comments were made, which would be taken into account when the Directorate took its decisions on Wednesday 26th June 1996. On behalf of the Management Board, the Director-General thanked D. Plane, J. Ellis and the members of their committees for their work. The Management Board also discussed in closed session other advancement proposals made in the context of the 1996 advancement exercise where the final decisions would be taken by the Directorate on 26th June.

1) see report on the June Council Session in last week's Bulletin

CERN Training Plan 1996

P.-G. Innocenti, Chairman of the Joint Training Board (JTB), presented the CERN Training Plan for 1996 setting out a review of progress on implementing the recommendations of the 1995 CERN Training Plan and the new recommendations for 1996, in which particular attention had been focused on newcomers and staff starting their second contract. Concerning implementation of the 1995 recommendations, considerable progress had been made with regard to induction training and procedures, which the JTB considered should be extended to fellows. However the JTB took the view that more action was needed in such areas as career development planning, succession planning, assessment of individual training requirements, dissemination of information about the Organization and preparing staff for contacts with the media. In view of the additional effort required to implement the 1995 recommendations, those for 1996 were less ambitious and included: the introduction of career development discussions based on a core curriculum aimed at preparing individual training plans to cover the initial three-year contract; introductory management training for all professional staff during their second three-year contract on completion of the essential prerequisite courses from the core curriculum; increased involvement of supervisors in discussion, definition, follow-up and recording of training objectives; giving high priority to setting up a simple but comprehensive training database, linked to the personnel database, for recording all training events including information on course objectives, content and evaluation data; identifying and meeting training requirements for the LHC programme. B. Blair also presented information on the procedures for the authorisation and evaluation of training. After some discussion, the Management Board generally endorsed the report and the recommendations for 1996 and the Director-General invited the Management Board to submit any further comments on the proposals with a view to revision of the document in time for further examination at the Standing Concertation Committee meeting on 10 July.

Writing Technical Specifications

The Research and Technical Director, H. Wenninger, reported that a meeting had been arranged on 13 June, attended by R. Tassinari, H. Alley, P. Bernard, W. Blair and P.G. Innocenti, to discuss recent proposals in this area. The following proposals had emerged from that meeting: the current training programme should continue; information seminars should be organized for directors and division leaders to allow them to appreciate the advantages of the functional analysis method in the writing of specifications; those attending the seminars should meet at the end of the academic year to assess the value of the training. A first seminar had been held on 26 June and the follow-up assessment meeting had taken place later the same day.

Site Access Controls

P. Ciriani presented a memorandum setting out proposals for a two-phase plan, consisting of transitional arrangements followed by a definitive operational stage, aimed at reconciling CERN's long tradition of an open site policy with the constraints of a complex modern research laboratory. He emphasized that the proposals were fully in line with the policy recommended by various

working groups and with the detailed provisions of Operational Circular No. 2. Following some discussion on basic principles and procedures, the Management Board generally endorsed the policy outlined in the memorandum.

Administrative Protocol between CERN and Spain's Centre for Technological and Industrial Development (CDTI)

The Management Board was informed that an administrative protocol had been signed by CERN and the CDTI for the training of Spanish technical graduates in technologies related to particle physics. The fellowships, which did not fall within the scope of CERN's fellowship programme, would be granted for one year, normally extended for a second. The cost of stipends would be borne by the CDTI.

Elections to the Staff Association Executive Committee

The Management Board was informed of the election of the new Executive Committee of the Staff Association.

Shutdown of the CERNVM service

D. Jacobs reported that, in line with previous announcements, the CERNVM service was scheduled to be shut down definitively at midnight on Sunday 30 June. No major problems had been identified. The Management Board expressed satisfaction that the shutdown appeared to be going smoothly and that problems to users had been minimised, *inter alia* as the result of adequate prior information.

La version française sera publiée dans le Bulletin de la semaine prochaine

SEMINARS

SEMINAIRES

Wednesday 10 July

PS SEMINAR

at 11.00 hrs - PS Large Conference Room

High Intensity Upgrade at the Brookhaven AGS

by J. Michael BRENNAN / BNL, U.S.A.

The AGS proton intensity has reached 6.3×10^{13} protons per pulse. Key ingredients of the upgrade program as well as operational experiences will be described. Progress towards achieving 10^9 Gold ions per bunch will also be described.

Wednesday 10 July

THEORETICAL SEMINAR

at 14.00 hrs - TH Conference Room

Evidence for the observation of a glueball

by Don WEINGARTEN / IBM

It is generally believed that QCD predicts the existence of glueballs, states composed mainly of chromoelectric fields without an energetic quark-antiquark pair, occurring either as physical particles themselves or in linear combination with states which do include an energetic quark and antiquark. Over the years since QCD was first proposed, experimental searches for particles with large glueball contributions have yielded ambiguous results. The main difficulty in identifying such resonances has been the absence of a reliable, quantitative determination of the properties QCD predicts for these particles. For the lightest glueball, a numerical evaluation of the mass and decay rates into several different two-body final states has now been completed using the valence (quenched) approximation to lattice QCD on the GF11 parallel computer. The calculation ran continuously for two and a half years. The predicted properties are in good agreement with properties of a particle first observed fourteen years ago, but whose interpretation according to QCD has not previously been settled. It appears highly probable that this particle is a glueball with a relatively small contamination of states including an energetic quark-antiquark pair.

Friday 12 July

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs - TH Conference Room

Squark and gluino production at hadron colliders including SUSY - QCD corrections

by Michael SPIRA / CERN

The search for squarks and gluinos is among the most important experimental endeavours at present and future hadron colliders. The full SUSY - QCD corrections including gluino exchange contributions will be presented and discussed. They have been determined for squark pair, squark-antisquark, gluino pair and mixed squark-gluino production processes. The renormalization and factorization scale dependence is reduced significantly. The production cross-sections increase by 10% - 90% so that the inclu-

sion of SUSY - QCD corrections will be important for experimental analyses at the Tevatron and LHC. Moreover, they result in a rise of the present exclusion limits for squark and gluino masses by about 15 to 35 GeV. The SUSY - QCD corrections to the transverse momentum and rapidity distributions are approximately of the same size as the corresponding corrections to the total cross-sections. This results in a simple rescaling of the distributions within a sufficient approximation for experimental analyses.

Thursday 18 July

SL SEMINAR

at 16.00 hrs* - SL Auditorium, Preveessin, bldg. 864

Measurements of longitudinal beam echoes in the SPS

by Oliver BRUENING / CERN

The results of three beam echo experiments in the SPS will be presented. The aim of these experiments was first to observe this phenomenon and secondly to analyse possible applications of beam echo measurements as a diagnostic technique in accelerator physics.

The beam echo is a manifestation of the proton beam "memory". Without damping, the particles in a storage ring will not forget the information of any signal applied to the beam. For example, by applying two short consecutive RF pulses to the beam, a longitudinal beam echo can be observed even long after the signal of the two initial pulses has disappeared due to the beam decoherence.

The shape and amplitude of the echo signal contain useful information about the beam distribution and diffusion processes in the system. The beam echo measurements will be compared with analytical estimates and with experimental data obtained by Schottky measurements.

* Coffee and tea will be provided at 15.30 hrs

Monday 22 July

TECHNICAL PRESENTATION

at 10.00 hrs - CN Auditorium, bldg 31/3-004 & 5

The Aldor Programming Language: Reconstructing an Algebra System from Elementary Particle

by Stephen WATT / University of Nice-Sophia Antipolis & The Numerical Algorithms Group Ltd (NAG)

This talk presents a high-level view of Aldor, the new programming language used to extend the Axiom algebra system.

The formulation of the programming language has tried to balance the mathematical desire for generality and uniformity, on one hand, with the practical requirements of the most demanding symbolic and numeric computation, on the other. For example, types and functions are first class values, and dependent types are fully supported, but their precise formulation has been carefully arranged to allow effective compilation and optimisation.

The basic semantic elements of the language are highly orthogonal and can be combined in quite powerful ways. Several trendy styles of computing can be reconstructed in this manner.

The Aldor compiler can be used to generate code which runs within the Axiom system, separately, or linked into other applications.

Organiser : S. Cannon / CN / 5036

EDUCATION SERVICES EDUCATIFS

<i>Wed. 10 July</i>	09.15	C. Llewellyn Smith	An Introduction to CERN and to Particle Physics (1/3)
	10.15	C. Llewellyn Smith	An Introduction to CERN and to Particle Physics (2/3)
	11.15	C. Llewellyn Smith	An Introduction to CERN and to Particle Physics (3/3)
<i>Thn. 11 July</i>	09.15	E. Lillestøl	Basic Concepts in Particle Physics (1/4)*
	10.15	E. Lillestøl	Basic Concepts in Particle Physics (2/4)*
	11.15	A. de Rujula	Introduction to the Fundamental Concepts of Particle Physics (1/7)
<i>Fri. 12 July</i>	09.15	L. Foa	Collider Physics (1/6)
	10.15	L. Foa	Collider Physics (2/6)
	11.15	A. de Rujula	Introduction to the Fundamental Concepts of Particle Physics (2/7)
	14.15	E. Lillestøl	Basic Concepts in Particle Physics (3/4)*
	15.15	E. Lillestøl	Basic Concepts in Particle Physics (4/4)*
Next week			
<i>Mon. 15 July</i>	09.15	L. Foa	Collider Physics (3/6)
	10.15	L. Foa	Collider Physics (4/6)
	11.15	A. de Rujula	Introduction to the Fundamental Concepts of Particle Physics (3/7)
<i>Tue. 16 July</i>	09.15	L. Foa	Collider Physics (5/6)
	10.15	C. Jarlskog	The Standard Model (1/6)
	11.15	A. de Rujula	Introduction to the Fundamental Concepts of Particle Physics (4/7)
<i>Wed. 17 July</i>	09.15	L. Foa	Collider Physics (6/6)
	10.15	C. Jarlskog	The Standard Model (2/6)
	11.15	A. de Rujula	Introduction to the Fundamental Concepts of Particle Physics (5/7)
	14.15	S. Jarp	Computing at CERN (1/3)
	15.15	S. Jarp	Computing at CERN (2/3)
<i>Thu. 18 July</i>	09.15	C. Jarlskog	The Standard Model (3/6)
	10.15	C. Jarlskog	The Standard Model (4/6)
	11.15	A. de Rujula	Introduction to the Fundamental Concepts of Particle Physics (6/7)
<i>Fri. 19 July</i>	09.15	C. Jarlskog	The Standard Model (4/6)
	10.15	C. Jarlskog	The Standard Model (5/6)
	11.15	A. de Rujula	Introduction to the Fundamental Concepts of Particle Physics (7/7)
Next week			
<i>Mon. 22 July</i>	09.15	H.J. Hilke	Particle Detectors (1/6)
	10.15	H.J. Hilke	Particle Detectors (2/6)
	11.15		
<i>Tue. 23 July</i>	09.15	H.J. Hilke	Particle Detectors (3/6)
	10.15	H.J. Hilke	Particle Detectors (4/6)
	11.15	J. Jowett	Particle Accelerators (1/5)

* For non-physics students

<i>Wed. 24 July</i>	09.15	J. Jowett	Particle Accelerators (2/5)
	10.15	H.J. Hilke	Particle Detectors (5/6)
	11.15	M.W. Krasny	Deep Inelastic Lepton Scattering (1/3)
<i>Thu. 25 July</i>	09.15	J. Jowett	Particle Accelerators (3/5)
	10.15	H.J. Hilke	Particle Detectors (6/6)
	11.15	M.W. Krasny	Deep Inelastic Lepton Scattering (2/3)
<i>Fri. 26 July</i>	09.15	J. Jowett	Particle Accelerators (4/5)
	10.15	J. Jowett	Particle Accelerators (5/5)
	11.15	M.W. Krasny	Deep Inelastic Lepton Scattering (3/3)
Next week			
<i>Mon. 29 July</i>	09.15	J. Knobloch	Off-line Computing from Raw Data to Physics Results (1/3)
	10.15	A. Rubbia	Current Problems in Neutrino Physics (1/6)
	11.15	A. Rubbia	Current Problems in Neutrino Physics (2/ 6)
<i>Tue. 30 July</i>	09.15	J. Knobloch	Off-line Computing from Raw Data to Physics Results (2/3)
	10.15	K. Peach	CP Violation (1/3)
	11.15	A. Rubbia	Current Problems in Neutrino Physics (3/6)
<i>Wed. 31 July</i>	09.15	J. Knobloch	Off-line Computing from Raw Data to Physics Results (3/3)
	10.15	K. Peach	CP Violation (2/3)
	11.15	A. Rubbia	Current Problems in Neutrino Physics (4/6)
<i>Thu. 1 August</i>	09.15	S. Cittolin	Trigger and Data Acquisition (1/3)
	10.15	K. Peach	CP Violation (3/3)
	11.15	A. Rubbia	Current Problems in Neutrino Physics (5/6)
<i>Fri. 2 August</i>	09.15	S. Cittolin	Trigger and Data Acquisition (2/3)
	10.15	S. Cittolin	Trigger and Data Acquisition (3/3)
	11.15	A. Rubbia	Current Problems in Neutrino Physics (6/6)
Next week			
<i>Mon. 5 August</i>	09.15	K. Hubner	New Ideas on Accelerator Technology (1/1)
	10.15	A. Cohen	A Cosmology Primer (1 / 3)
	11.15		
<i>Tue. 6 August</i>	09.15	R. Stock	Heavy Ion Physics at CERN from SPS to LHC (1/2)
	10.15	A. Cohen	A Cosmology Primer (2/3)
	11.15		
<i>Wed. 7 August</i>	09.15	R. Stock	Heavy Ion Physics at CERN from SPS to LHC (2/2)
	10.15	A. Richter	Isolde Physics Overview (1/1)
	11.15	A. Cohen	A Cosmology Primer (3/3)
<i>Thu. 8 August</i>	09.15	N.N.	History of CERN and its Achievements (1/1)
	10.15	Student Session (1/2)	
	11.15	Student Session (2/2)	
<i>Fri. 9 August</i>	09.15	L. Evans	The Large Hadron Collider (1/1)
	10.15	R. Landua	LEAR Physics/A Short Overview (1/2)
	11.15	R. Landua	LEAR Physics/A Short Overview (2/2)
Next week			
<i>Mon. 12 August</i>	09.15	G. Veneziano	Dreams of a Finite Theory (1/1)
	10.15	G. Giudice	Introduction to Supersymmetry/Beyond the Standard Model (1/2)
	11.15	G. Giudice	Introduction to Supersymmetry/Beyond the Standard Model (2/2)
<i>Tue. 13 August</i>	09.15	Course Review	
	10.15	Course Review	
	11.15	Course Review	

These lectures are prepared for Summer Students but of course they are open to anyone at CERN. Many of these lectures treat topics at general level, so that they are a good opportunity for a staff member to find out more about something outside their daily work.

All lectures are given in English and held in the Auditorium. The complete programme (Word file) is available on WWW: <http://www.cern.ch/CERN/Division/PE/HRS/Recruitment/6.1pgm96.html>

Personnel Division
Tel. 7049

INFORMATIONS GENERALES GENERAL INFORMATION

ABSENCES MALADIE/ACCIDENT

Nous rappelons aux membres du personnel que, conformément aux Statut et Règlement du Personnel, tout membre du personnel du CERN doit se soumettre à un examen médical lors de la reprise du travail après un congé maladie:

- si son absence a été de 21 jours civils ou plus
- si son absence est imputable à **un accident professionnel/maladie professionnel(le)**.

L'initiative de l'examen médical incombe au membre du personnel lui-même qui doit contacter le Service médical **3186** avant ou dès la reprise du travail.

DRE.P. MAQUET

RESUMING WORK

In application of the Staff Rules and Regulations, every member of the CERN personnel is required to undergo a medical examination on resuming work after sick leave:

- if the absence has been for 21 calendar days or longer
- if the absence is caused by an **occupational accident or illness**.

It is incumbent upon the member of the personnel him/herself to contact the Medical Service **3186**, without awaiting its summons.

Dr E.P. MAQUET

A VENDRE OU A CEDER AUX DIVISIONS

- Pour utilisation vide
 - chariot motorisé, course 500 mm
 - chariot motorisé, course 1000 mm
 - chariot motorisé, course 1000 mm et vireur
 - 3 coffrets électrique et pneumatique
 - 4 verins
- Matériel visible au bat. Stockage 133

A. NOTARI
Service Vente AS/LO
Tel. 5782

RESTAURANTS

Plats conventionnés (déjeuner) semaine du 8 juillet

Fixed price main courses (lunch) week of 8 July

No 1 - COOP		No 2 - DSR	No 3 - Gén. de Rest.			No 1 - COOP	No 2 - DSR	No 3 - Gén. de Rest.
Bât. 501 - Site Meyrin		Bât. 504 - Site Meyrin	Bât. 866 - Site Prévessin			Bldg. 501 - Meyrin Site	Bldg. 504 - Meyrin Site	Bldg. 866 - Prévessin Site
Lundi-vendredi Samedi Dimanche	Heures d'ouverture: 07h00 - 01h00 07h00 - 23h00 Repas servis: 11h30-14h00 18h00-20h00 Prix (FS): a) 7.40 FS b) 8.70 FS	Heures d'ouverture: 06h30 - 18h00 Fermé sauf groupes 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 Meals served: 11h30-14h00 18h00-20h00 Prices (CHF): a) 7.40 CHF b) 8.70 CHF	Opening times: 06h30 - 18h00 Closed except for groups 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
	a) Cordon bleu de poulet Pommes mousseline Jardinière de légumes b) Sauté de porc aux champignons Riz pilaf Jardinière de légumes	a) Rôti de dinde - Sauce Zingara - Pommes d'arfin Salade verte b) Steak haché d'agneau Sauce au thym Tagliatelle au beurre Courgettes provençales GRILLADES EN TERRASSE	a) Brochette de dinde au gingembre Choux de Bruxelles b) Filet de perche du Nil sauce Nantua Riz Macédoine de légumes ENTRECÔTE GRILLÉE	Monday		a) Chicken "Cordon Bleu" Mashed potatoes Mixed vegetables b) Pork & mushroom stew Rice Mixed vegetables	a) Roast turkey in mustard sauce - fried potatoes green salad b) Fried mashed lamb steak with thyme sauce Buttered tagliatelle Fried zucchini GRILLED MEAT ON TERRACE	a) Turkey kebab with goring Brussels sprouts b) Nile perch fillet in Nantua sauce - Rice Diced vegetables GRILLED SIRLOIN STEAK
Lundi	a) Croustilles de merlan Riz sauvage Pois mangoutout b) Émincé de volaille à la chinoise Riz sauvage	a) Croquette de poisson Sauce tartare - Pommes persillées - salade verte b) Minute de boeuf à la chinoise - Riz thai Légumes chinois GRILLADES EN TERRASSE	a) Oeufs brouillés à l'espagnole Épinards b) Rôti de boeuf Pommes frites Tomate provençale	Tuesday		a) Fish fingers Wild rice Snow peas b) Chicken stir-fry Wild rice	a) Breaded fish stick with tartar sauce - Boiled potatoes - green salad b) Fried chipped beef in Chinese style - Thai rice Mixed vegetables GRILLED MEAT ON TERRACE	a) Spanish-style scrambled eggs Spinach b) Roast beef French fried potatoes Provence-style tomato
Mardi	a) Épaule de porc Pommes boulangères Petits pois b) Brochette de volaille Pommes en dés Courgettes	a) Steak haché de boeuf Sauce au poivre rose Pommes sautées - salade b) Brochette aux 3 saucisses Sauce moutarde Riz aux poivrons Petits pois à la française GRILLADES EN TERRASSE	a) Paupiette de veau sauce bordelaise Haricots verts b) Cuisse de poulet grillée Semoule de couscous Gratin de fenouil	Wednesday		a) Shoulder of pork Baked sliced potatoes Peas b) Chicken kebab Sautéed potatoes Courgettes	a) Fried mashed beef - pink pepper sauce - Fried potatoes - Green salad b) Choice of sausages on skewer - mustard sauce Rice - French beans GRILLED MEAT ON TERRACE	a) Stuffed veal slice in red wine sauce Green beans b) Grilled chicken leg Couscous Baked fennel
Mercredi	a) Quenelles de brochet Riz blanc Tomate b) Côte de porc poêlée Cornettes Carottes	a) Gratin de gnocchi à la paysanne Salade verte b) Suprême de volaille Madras - Riz à l'indienne Galette de maïs GRILLADES EN TERRASSE	a) Rognons de porc à la crème Petits pois b) Sauté de boeuf à la créole Tortasades au beurre Carottes	Thursday		a) Pike dumplings Rice Tomato b) Pan-fried pork chop Pasta Carrots	a) Gnocchi au gratin with ham and mushrooms Green salad b) Fried breast of chicken in curry sauce - Indian rice Corn pancake GRILLED MEAT ON TERRACE	a) Sliced pork kidneys in cream sauce Peas b) Creole-style beef stew Buttered pasta Carrots
Jeu	a) Saucisse de veau Rôti Haricots verts b) Dinde de cabillaud Pommes nature Ratatouille	a) Omelette aux fines herbes - Pommes au lard Salade verte b) Dinde de saumon au cœur d'aneth - riz créole Haricots verts à l'ail GRILLADES EN TERRASSE	a) Gratin de fruits de mer Ratatouille b) Côte de porc grillée Pommes boulangères Salsifis	Friday		a) Veal sausage Swiss hash brown potatoes Green beans b) Slice of cod Boiled potatoes Ratatouille	a) Savoury omelette - Fried potatoes with bacon Green salad b) Poached salmon fillet with dill sauce - Créole rice - Buttered french beans GRILLED MEAT ON TERRACE	a) Baked sea-food in cream sauce Ratatouille b) Grilled pork chop Baked sliced potatoes Salsify
Vendredi								

INFORMATION

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

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

Association
du personnel
CERN

Staff
association
CERN

STAFF,,ASSOCIATION@MACMAIL.CERN.CH

Adresse AP sur le WEB

http://www.cern.ch/CERN/Staff_Association

2 Juillet 1996

Reunion ordinaire du Conseil du personnel, le 25 juin 1996

Resume: activites du Comite executif — election du nouveau President de l'Association du personnel et du nouveau Comite executif

Le Conseil du personnel s'est reuni le 25 juin, a 4h.00, sous la presidence de Lorenzo Resegotti.

Il a d'abord entendu un rapport succinct sur les reunions du Comite des Finances et du Conseil. Il a ensuite entendu et discute un rapport sur des developpements recents relatifs a la garantie des pensions en cas de dissolution de l'Organisation. Nous reviendrons prochainement sur cette question importante.

Le Conseil a ensuite procede a l'election du nouveau President de l'Association du personnel et a son Comite executif. Un seul candidat a la presidence s'est presente, Michel Vitasse. Apres avoir presente la liste du Comite executif avec lequel il demandait a etre élu¹, liste qui demontre son souci de continuity avec l'equipe precedente, il a fait une declaration dont nous reproduisons ci-apres la premiere partie:

Soyons clairs: l'avenir de l'Organisation et celui de son personnel sont intimement lies. Nous voulons les defendre tous les deux. Le CERN est un modele reconnu de cooperation internationale europeenne. Il est reconnu aussi comme un veritable centre d'excellence. Nous doutons qu'il puisse le rester. En effet:

- Nous passons insensiblement de la cooperation a la competition entre Etats membres qui semblent maintenant plus preoccupes d'un juste retour

financier que d'un vrai retour intellectuel. Or, nous n'aurons pas de developpement culturel et economique sans un enseignement de quality, lui-meme bati sur une recherche fondamentale de haut niveau.

- Nous pouvons craindre aussi que le CERN perde son independance, perde le controle de ses activites et perde ses competences propres par une politique de reduction considerable de l'effectif titulaire et par une politique de privatisation et de sous-traitance accrue dont les principes ne sont d'ailleurs ni discutes ni definis.
- Nous pouvons craindre que le CERN ne puisse pas continuer a recruter, garder, motiver le personnel titulaire de haute competence dont il a besoin en offrant a nos jeunes collegues des contrats precaires, deux ou trois comites de selection, deux periodes probatoires avant d'obtenir un contrat d'une certaine stabilite, mais avec des salaires degrades, des indemnites reduites, des retraites mal protegees, etc.

Cette deterioration du climat et cette regression sociale que l'Organisation installe va rompre l'equilibre actuel et exciter certains extrémistes au risque de provoquer sabotages ou violences a l'interieur de notre Organisation.

¹ cette liste a ete publiee dans le Bulletin hebdomadaire de la semaine derniere.

C'est pourquoi nous pensons que l'Association du personnel doit prendre des initiatives: il faut que tous les salariés travaillant sur le site, dans leurs diversités nationales et sociales, se rassemblent pour instaurer un pacte social dans le respect des missions de l'Organisation.

Vous l'avez compris, nous voulons défendre la compétence et l'indépendance de la fonction publique internationale et nous voulons développer et créer des solidarités:

- entre jeunes générations et générations expérimentées,
- entre personnel du CERN et personnel des entreprises d'appui industriel,
- entre titulaires et visiteurs,
- entre travailleurs de la fonction publique internationale.

C'est pourquoi nous voulons organiser notre programme selon les quatre axes prioritaires suivants :

- Entreprises,
- Création d'emplois / Temps choisi,
- Consolidation de notre système de protection sociale,
- Relations avec les autres Organisations Internationales... /....."

La suite de cette déclaration, qui développe ces quatre axes prioritaires et qui expose la méthode prévue, sera publiée la semaine prochaine.

Le vote a ensuite eu lieu et, suite à son élection avec l'ensemble du Comité Exécutif présenté, le nouveau Président a adressé de chaleureux remerciements au Président sortant Michel Borghini pour tout ce qu'il a fait durant de nombreuses années pour le personnel, TAP et le CERN..

Il a choisi quelques exemples significatifs montrant que " Pendant ton mandat de Président tu nous as non seulement montré l'utilité d'avoir une stratégie, mais aussi celle d'être généreux, rigoureux et d'avoir beaucoup de persévérance "

Il a aussi souligné clairement que "Si l'AP a une aussi bonne réputation auprès du personnel, du Management, des délégués des États membres et à l'extérieur du CERN, c'est en grande partie grâce à toi et à ta manière de conduire l'AP. "

Enfin, citant Michel Borghini dans le Rapport Annuel de 1995 à propos du manque de politique globale du personnel, il en a déduit que " la fin de cette citation nous laisse espérer que tu continueras, avec nous, à œuvrer avec ta persévérance habituelle pour mener à bien nos actions. "

Cette séance du Conseil du Personnel a été levée à 16h.30 et a été suivie d'un vin d'honneur pour fêter le passage du Comité Exécutif au suivant.

Résultats publiés dans le Bulletin hebdomadaire de la semaine dernière.

GREVE SUR LE SITE DU CERN

1er juillet:

Ce matin, toutes les employées de l'entreprise "net et clair" — une trentaine de personnes travaillant au nettoyage des foyers et hostels du CERN — se sont mises en greve. Elles venaient de recevoir la lettre de licenciement suivante:

"Madame, en raison des modifications de la Convention Collective de Travail^ entree en vigueur le 1 Janvier 1996, il ne devient plus possible de maintenir les conditions de travail. En consequence, nous nous voyons contraints de resilier voire contrat de travail avec effet au 31 août 1996. Neanmoins, nous sommes prêts a examiner de nouvelles modalites d'engagement. Nous vous remercions de voire collaboration et nous vous prions d'agreer, Madame, nos salutations les meilleures."

Avec le soutien du Syndicat (Suisse) de l'Industrie et du Batiment (SIB), ces travailleuses sont bien determinees a faire valoir leurs droits. L'Association du personnel est solidaire avec elles.

3 juillet:

leur employeur ayant annule leur lettre de licenciement, nos collegues ont repris le travail.

Nous nous en rejouissons.

STRIKE AT CERN

1st July:

This morning,, all the employees of the firm "net et clair" some thirty persons who clean the hostels at CERN, have gone on strike. They had received the following letter of dismissal:

"Madame, due to changes to the collective wage agreement which came into force on 1 January 1996, it is no longer possible to keep the present working conditions. Thus, we are forced to terminate your employment contact with effect from 31 August 1996. Nevertheless, we are ready to study new terms and conditions of employment. Thank you for your collaboration. Yours sincerely/

With the support of the Swiss Union for Industry and Construction (SIB), these workers are determined to stand up for their rights. The Staff Association associates itself with them.

3rd July:

Their employer having withdrawn the letters of dismissal, our colleagues have resumed work.

We are of course very pleased with this outcome.

1 Ces modifications comportent une augmentation de la remuneration horaire du travail.

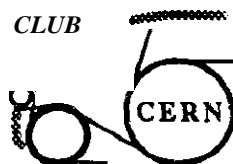
These changes include an increase in the hourly rate of remuneration
Our translation of the French original

CLUBS



AUTOMOBILE

CLUB



CLUB

AUTOMOBILE

Bonne nouvelle !!!

Vous etes nombreux, petits et grands, a les attendre,

**** ILS SONT ENFIN ARRIVES ****

En effet, le Comite du Club est heureux de pouvoir satisfaire et repondre aux nombreuses demandes de T-shirt avec le nouveau logo de l'Automobile Club du CERN.

Venez les voir et nous voir a la permanence du Club, vous serez surpris et conquis par leur qualite et leur finition, mais surtout par leur prix;

Taille enfants : CHFrs 12.-

Tailles MXL : CHFrs 15.-

Pour information :

Le garage City, representant la marque HONDA, nous informe qu'il lance une action - Rabais Special - de duree limitee sur tous les vehicules de la marque, a savoir :

- 17% sur la liste de prix, TVA incluse

- 7% sur les prix H.T.

- 7% sur les prix nets.

Ces avantages vous seront accordes seulement sur presentation d'un bon signe emanant du Club.

Pour tous renseignements concernant nos activites, veuillez contacter le responsable :

Bat. 592 Kjm 74007

de 16h45 a 19h : du lundi au vendredi

de 08h00 a 12h : le samedi

CROQUET

Switzerland versus England 22/23 June 1996

The team from England travelled by car from Cheltenham arriving on Friday evening. Their route took them via Dijon and over Le col de la Faucille the intention being to have a view of lac Lemman and the Alps. Unfortunately due to the terrible weather conditions the only view they were able to have was of the car in front! They arrived at the lawns at 18:00hrs hoping to have time to practice and get a "feel" for the lawns, but again the weather was against them, the torrential rain persisted. Practice was abandoned and an evenings entertainment was decided upon instead.

Play started at 09:00hrs Saturday, the weather had improved a little, there was not much sun but at least it was dry. After the first day of play, with 8 matches remaining, England had a commanding lead of 5-2. The afternoons play was interrupted, this time not due to rain, for about an hour to watch "THE" football match (England-Spain).

On Sunday morning Switzerland tried to fight back, after the mornings play England were leading 6-3, and needed only two more wins to guarantee their victory.

The pressure was on in the afternoon, Ian Sexton made short work of England's No.1, bringing the score to 6-4, Norman Eatough returning after a long absence, due to injury, regained his form convincingly beating England's No.2 the score changing to 6-5. Mike Gerard, who was playing his first international singles match, went down by the closest possible margin losing +1 on time. A fine performance considering the pressure he was under due to the closeness of the scores, 7-5.

With only two matches to go, England required only one more win. Dave Underhill playing No 3 for Switzerland was up against England's No 1. Dave's opponent got off to a good start putting Dave under a lot of pressure, Dave fought back admirably but his stronger opponent came through to seal victory for England. The last game was played and won by Ian bringing the score to 8-7

There were lots of "if onlys" after the weekends play as always with croquet. All the games were played with tremendous spirit and humour. The various "apres-croquet" events at a variety of different locations made it a truly memorable International.



Do you like listening to music, any kind of music, well if the answer is yes then maybe you should take a look at the CERN RECORD CLUB catalogue. You can find a complete list of over 3 to 4 thousand CDs that the club currently has in stock by looking on WWW at the following URL:

<http://www.cern.ch/CERN/Clubs/Records>

As you will see from the catalogue there are CDs for every taste, from the very latest POP CDs to JAZZ and a huge selection of CLASSICAL CDs. The club adds CDs to this catalogue on a regular basis, in the case of the POP CDs a "TOP 10" is added once a month. The selection for the month of June is shown below, and for the other categories a larger order (about 80 CDs) is placed once or twice a year. Members of the club are encouraged to give their suggestions and request for the new selections.

NEW COMPACTS DISCS - JUNE 96

ALL-4-ONE
AND THE MUSIC SPEAKS
BLUR
THE GREAT ESCAPE
CRANBERRIES, THE
TO THE FAITHFUL DEPARTED
ENYA
THE MEMORY OF TREES
FILM MUSIC
GOLDENEYE
MICHAEL, GEORGE
OLDER
MORISSETTE, ALANIS
AGGED LITTLE PILL
ASIS
(WHAT'S THE STORY)
MORNING GLORY ?
RAMAZZOTTI, EROS
TAKE THAT
GREATEST HITS

If you would like more information about the club please contact:



Stan Cannon U = y 75306 or
stanley.cannon@cern.ch



FOOTBALL

Demi-finales

Match	Score
OPAL - PS	0-2
DELPHI - CRYO	0-3
FAIRBOOTS - USCM	3-4
CN - ISS	3-2
EST - PPE	2-3
DELATTRE - CHALTRON	1-3

Finales

Match	Score	Finales
THEORIE - L3	5-6	13em. place
OPAL - DELPHI	1-4	11em. place
CRYO - PS	1-6	96m. place
FAIRBOOTS - ISS	2-1	7em. place
USCM - CN		5em. place
EST - DELATTRE		3em. place
PPE - CHALTRONS		1&re place

Merci a tous et particulierement a ceux qui ont joue sur le stabilise.

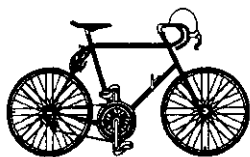
Le Championnat se termine avec les matchs de classement cette semaine.

Nous esperons que toutes les equipes et tous les joueurs se sont bien amusees, dans un bon esprit auquel nous tenons particulierement.

Vous avez peut-etre des remarques, des suggestions pour Ten prochain. Une discussion est prevue a ce sujet le jeudi 11 juillet, a 17h.30, a la Cafeteria du Batiment Principal.

Pensez a etre represents ou transmettez vos remarques par e-mail, a Serge CLAUDET.

Bonnes vacances a tous.



VELO

Prochaines sorties

SAMEDI 6 JUILLET

59 kilometres sur terrain pratiquement plat (pour une fois...) au depart de la piscine de Ferney Voltaire a faire soit le matin a 9h00 soit l'apres-midi a 13h30, a vous de choisir ou de faire les deux possibilites si la forme est la!

SAMEDI 13 JUILLET

Deux possibilites :

Une sortie sur la journee avec 164 kilometres et des petites difficultes a avaler sur le parcours, depart a 8h30 parking des drapeaux CERN. Pensez a prendre des sous pour l'arret reconfort.

Pour ceux qui preferent une ballade plus modeste, rendez-vous parking piscine de Ferney Voltaire a 14h00 et les participants choisiront leur parcours.

INFO : des maillots et des gants tres confortables, toujours disponibles dans toutes les tailles, que vous soyez membre ou non. Renseignements au 75796 aupres de Christian.



YACHTING

TOMORROW SATURDAY 6 JULY

MONTHLY REGATTA

DEMAIN SAMEDI 6 JUILLET

REGATE MENSUELLE

SOON/BIENTOT

"LA NOCTURNE"

12 (Evening/Soir), 13 et 15 juillet

All details / Tous les details
YCC-NEWS 3/96



CRICKET

CERN CC at the Zuoz Cricket Festival 1996

CERN represented the Swiss Cricket Association in this year's Festival at Zuoz in the Engadine together with 7 other teams from Austria, Germany, Italy, the Zuoz Lyceum and the St. Moritz Cricket on Ice Club.

Drawn in the first round against Varese (Euratom) on the best of the four pitches a win would ensure playing on one of the two better pitches for the remainder of the Festival. Alas it was not to be, despite putting Varese in to bat first and holding their score to 108/7 from the 32 overs, 20 of these runs coming from the final 2 overs! Pattison took 3 for 19. CERN's innings was over in 20.2 overs, only one batsman scoring double figures (Allen 28), the next highest score being extras (9)!

So, next day CERN were drawn against their old friends Milan who we had played just a fortnight previously. Changing tactics, CERN batted first and scored 113/9 in the 32 overs with Chohan 22 not out and Sale 20. Milan had mixed fortune, being consistently behind the CERN run rate until the 27th over when with a flurry they caught up and passed the CERN score in the next 3 overs. Allen had the best bowling figures with 4/30.

So came the final game playing for 7th and 8th places against the European Patent Office, Munich. Batting first again, CERN had more success, scoring 140 (Eddy 53 and Onions 55 n.o.) in the agreed 24 over match to allow some to get away early for the long haul home. At last, could this be CERN's day for victory? Not a bit of it! Within 10 overs, Munich were in front and stayed there, winning the match in the penultimate over at 141/7.

Thus CERN won the wooden spoon, but had had an enjoyable weekend. Great credit is due to Mike Sale who took 7 catches behind the wicket during the weekend, closely followed by Allen with 5 in the field.

Next matches are at CERN Preveessin against Monte-Carlo on 6 July, and against Winterthur in a Swiss League match on 7 July.

Further information about Cricket can be found on the World Wide Web at url:

<http://ecponion.cern.ch/cricket/welcome.html>,

or from:

D.J. Allen (72575; David.John.Allen@cern.ch) or
B. Pattison (72923; Bryan.Pattison@cern.ch) or
C Onions (75039; Chris.Onions@cern.ch).

COOPERATIVES



(Bat. 563)

**Prix promotionnel pour le Fuel
les 5 et 6 juillet**

Nous vous demandons de passer d'urgence votre commande car la prolongation de la promotion est problématique.

Secretariat, heures d'ouverture:
du lundi au vendredi, de 13h.00 à 16h.30 73339

Magasin, heures d'ouverture:
16h.30 - 19h.00 (sauf lundi)
9h.30 - 12h.00 le samedi - Iff (059) 50 40 88 39

Adresse de notre Magasin :
649, Rue des Alpes, à Moens

COOPIN

(Bat. 563)

Heures d'ouverture du magasin :
lundi au vendredi de 13h.00 à 16h.30

**BZ 72864-73637.*

Pour vos achats sur commandes, nos catalogues sont à votre disposition. COOPIN vous propose de bonnes réductions de prix sur :

Gros appareils ménagers : Bauknecht, Miele, V-ZUG, etc.

Appareils HIFI: Technics, Sony, Philips, etc.

Auto-radios : Blaupunkt, Panasonic. Pioneer, etc.

De nouveau en stock :

Appareils photo OLYMPUS :

- Mju Zoom 105 Frs 385.-

- IS 100 S Frs 559.-

Apirateurs MIELE :

- S 334 I Frs 476.-

- S 448 I Frs 667.-

Gagnez du temps, pensez COOPIN

CINE CLUB

THURSDAY 11 JULY 1996, at 8.30 p.m.

JEUDI 11 JUILLET 1996, à 20H.30

Main Auditorium / Amphitheatre Batiment Principal

Vanya on 42nd street

Vanya 42eme rue

of / de Louis HALLE

Une occasion de decouvrir l'interessante adaptation en anglais de ce classique du theatre russe par David Mamet, un des dramaturges les plus doues de sa generation.

A New York, sur la 42nd rue, se deroule dans un theatre decrepi la repetition generale de la piece " Uncle Vania " de Tchekhov.

An occasion to discover this interesting adaptation in English of this classic of the Russian theatre by David Mamet, one of the most gifted dramatist of his generation.

In New York on the prestigious 42nd street in a decrepit theatre, a performance of Chekovs play " Uncle Vanya " is about to start.

**English dialogue with French and German sub-titles
Version originale Anglais sous-titree Fran^ais-Allemand**

Entrance / Entree CHF 8.-

Calendrier hebdomadaire

1996

Weekly Calendar

Lundi Monday	8.7	Mardi Tuesday	9.7	Mercredi Wednesday	10.7	Jeudi Thursday	11.7	Vendredi Friday	12.7						
				A SUMMER STUDENT LECTURES 09.15 An Introduction to CERN and to Particle Physics (1/3) C. Llewellyn Smith 10.15 An Introduction to CERN and to Particle Physics (2/3) C. Llewellyn Smith 11.15 An Introduction to CERN and to Particle Physics (3/3) C. Llewellyn Smith	A SUMMER STUDENT LECTURES 09.15 Basic Concepts in Particle Physics (1/4) E. Lillesstøl 10.15 Basic Concepts in Particle Physics (2/4) E. Lillesstøl 11.15 Introduction to the Fundamental Concepts of Particle Physics (1/7) A. de Rújula	A SUMMER STUDENT LECTURES 09.15 Collider Physics (1/6) L. Foà 10.15 Collider Physics (2/6) L. Foà 11.15 Introduction to the Fundamental Concepts of Particle Physics (3/4) E. Lillesstøl 14.15 Basic Concepts in Particle Physics (3/4) E. Lillesstøl 15.15 Basic Concepts in Particle Physics (4/4) E. Lillesstøl	A SUMMER STUDENT LECTURES 09.15 Collider Physics (4/6) L. Foà 10.15 The Standard Model (1/6) C. Jarlskog 11.15 Introduction to the Fundamental Concepts of Particle Physics (4/7) A. de Rújula	A SUMMER STUDENT LECTURES 09.15 Collider Physics (5/6) L. Foà 10.15 The Standard Model (2/6) C. Jarlskog 11.15 Introduction to the Fundamental Concepts of Particle Physics (5/7) A. de Rújula 14.15 Computing at CERN (1/3) S. Jarp 15.15 Computing at CERN (2/3) S. Jarp	A SUMMER STUDENT LECTURES 09.15 Collider Physics (6/6) L. Foà 10.15 The Standard Model (3/6) C. Jarlskog 11.15 Introduction to the Fundamental Concepts of Particle Physics (6/7) A. de Rújula	A SUMMER STUDENT LECTURES 09.15 The Standard Model (4/6) C. Jarlskog 10.15 The Standard Model (5/6) C. Jarlskog 11.15 Introduction to the Fundamental Concepts of Particle Physics (7/7) A. de Rújula	16.00 SL SEMINAR Measurements of longitudinal beam echoes in the SPS by Oliver BRUENING / CERN				14.00 TH MEETING ON PARTICLE PHYSICS PHENOMENOLOGY Squark and gluino production at hadron colliders including SUSY - QCD corrections by Michael SPIRA / CERN
				11.00 PS SEMINAR High Intensity Upgrade at the Brookhaven AGS by J. Michael BRENNAN, BNL, U.S.A.				14.00 TH THEORETICAL SEMINAR Evidence for the observation of a glueball by Don WEINGARTEN / IBM							

A Auditorium / bldg 500
Amphithéâtre / bât. 500

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

LHC LHC Auditorium / bldg 30, 7th floor
Amphithéâtre LHC / bât. 30, 7e étage

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

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

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

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

M Microcosm Conference Room, bldg 33/R-09
Salle de Conférence Microcosm, bât. 33/R-09

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

CN CN Auditorium - bldg 31/3-004 & 5
Amphithéâtre CN - bât. 31/3-004 & 5

place as indicated
lieu selon indication

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

Deadline for insertion : Tuesday 12.00 hrs
Staff Association : bldg 64/R-002, tel. 2819
Media & Publications (DSU) : bldg 50/1-034, tel. 3.
e-mail : weekly_bulletin@cern.ch
staff_association@cern.ch

Dernier délai pour insertions : mardi 12.00 h
Association du Personnel : bât. 64/R-002, tél. 2819
Média & Publications (DSU) : bldg 50/1-034, tél. 3.