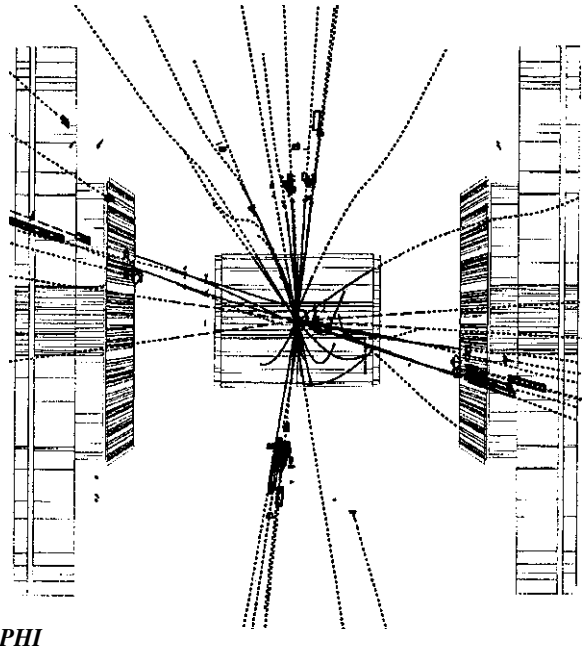
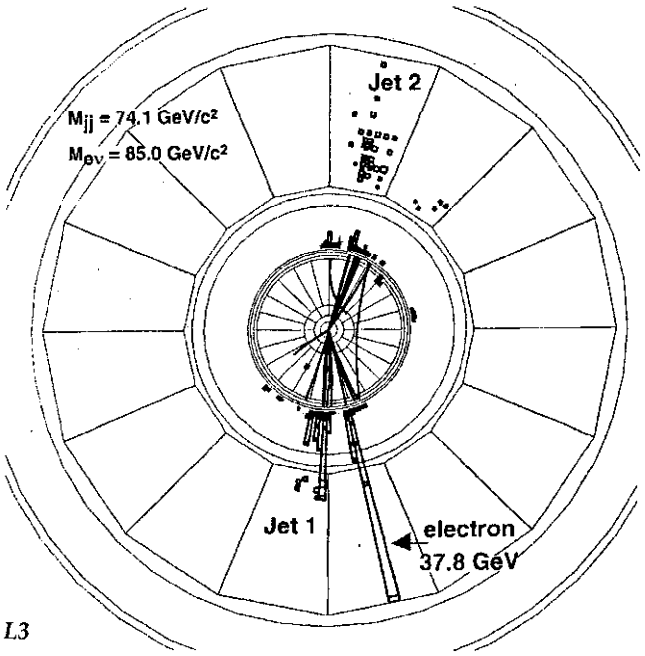
bulletin

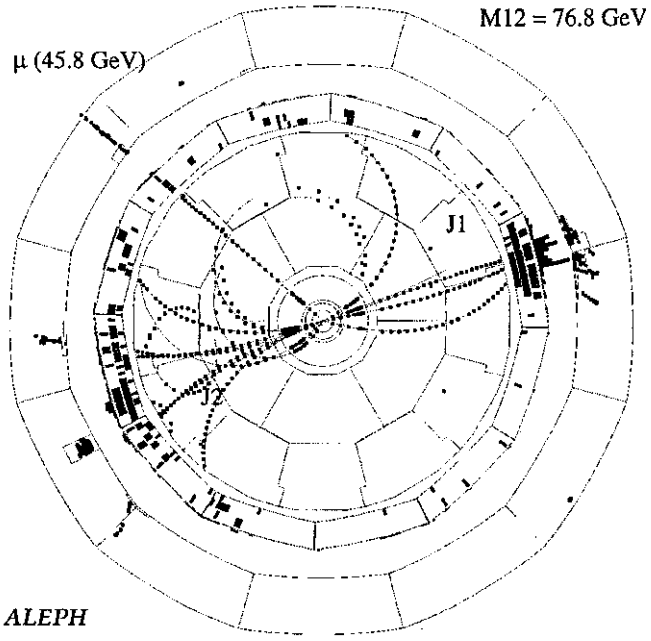
Week Monday 22 July no 30/96 Semaine du lundi 22 juillet



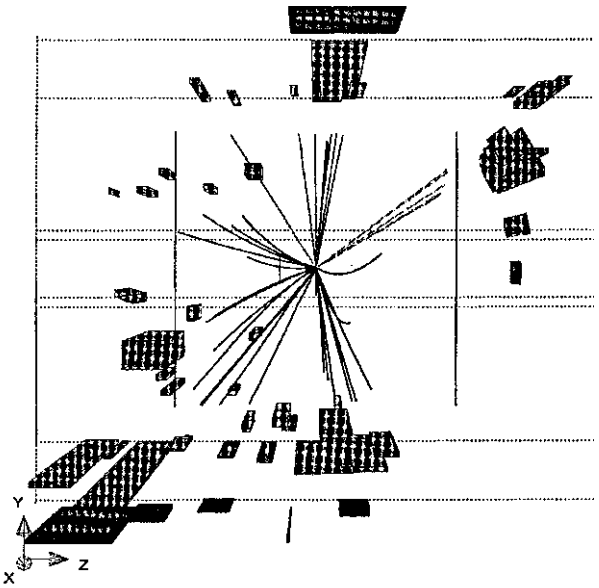
DELPHI



L3



ALEPH



OPAL

Premières paires de W au LEP2

Le LEP a produit la semaine dernière ses premières paires de particules W, faisant entrer la recherche en physique des particules dans un territoire nouveau et inexploré. Juste après midi le 9 juillet, DELPHI est devenue la première expérience à enregistrer un événement comprenant une probable paire de W, mais les autres détecteurs ont suivi peu après. Ce succès fait suite à un hiver laborieux d'améliorations qui ont transformé le LEP en un nouvel

First W-pairs at LEP2

LEP produced its first pairs of W particles last week, taking particle physics research into new and unexplored territory. Just after midday on 9 July, DELPHI became the first experiment to record a candidate W-pair event, but the other experiments were not far behind. This success follows a busy winter of upgrades which have transformed LEP into a new accelerator, earning it the name LEP2. Over the next few years, LEP2 will be further upgraded, bringing

A Vattente anxieuse... *Anxious moments...*

accélérateur et lui ont valu le nom de LEP2. Ces améliorations seront poursuivies ces prochaines années, apportant la possibilité de découvertes et élargissant notre connaissance de l'Univers.

Le LEP a été conçu pour étudier Tune des forces fondamentales de la nature, la force faible, source d'énergie du soleil et cause de quelques-unes des formes de radioactivité naturelle. Les particules W⁺, W~ et Z° sont les porteurs de la force faible. Pendant sept ans le LEP a produit des collisions de l'énergie exactement nécessaire pour créer le Z°, qui nous le savons maintenant "pèse" 91,1884 ± 0,0022 GeV, à peu près autant que 97 atomes d'hydrogène. Le LEP2 fonctionnera à environ deux fois cette énergie, assez pour produire les particules W⁺ et W~ en paires, un grand pas en avant dans les études de précision du CERN sur la force faible.

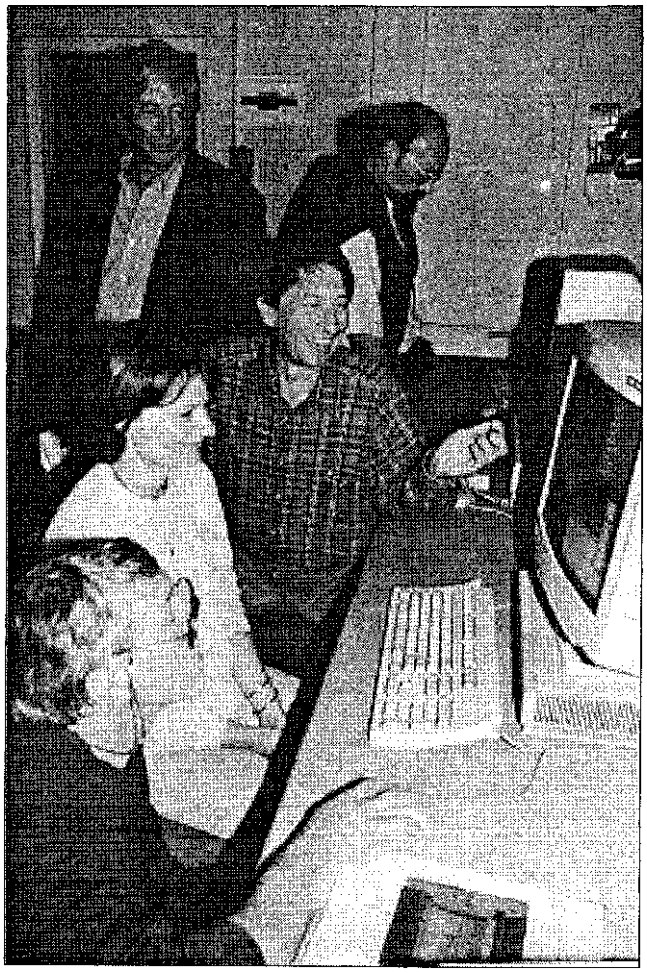
Les cavités accélératrices radiofréquence sont les moteurs du LEP et sa transformation en LEP2 a été réalisée en ajoutant à la machine de nouvelles cavités supraconductrices. Celles-ci accélèrent bien plus que les cavités ordinaires en cuivre et, autre avantage, consomment moins d'électricité. Après l'installation à l'automne dernier de 60 cavités supraconductrices, l'énergie du LEP est montée d'un premier cran, d'environ 90 GeV à 140 GeV. 84 nouvelles cavités installées au cours de l'hiver ont permis de commencer l'année au LEP2 avec une énergie de collision des faisceaux de 161 GeV - suffisante pour créer des paires de particules W⁺ W~. D'ici à 1998, 128 encore de ces cavités viendront s'ajouter dans le LEP, portant son énergie à 192 GeV et améliorant d'autant le potentiel de découverte de l'accélérateur.

Chaque augmentation de l'énergie apporte la possibilité de découvertes ou de surprises et les physiciens sont impatients de voir ce que leur révélera leur LEP survolté. Peut-être le boson de Higgs longtemps recherché fera-t-il sa première apparition ces prochaines années au LEP2? Peut-être aussi servira-t-il de révélateur d'une nouvelle et meilleure théorie de l'Univers. De nombreux théoriciens prédisent qu'une telle théorie, appelée supersymétrie, doit rapidement apparaître, avec des particules supersymétriques qui attendent qu'on les trouve. Si cette théorie est la bonne, l'une des plus légères

the possibility of new discoveries and extending our understanding of the Universe.

LEP was designed to study one of nature's fundamental forces, the weak force which fuels the sun and is responsible for some forms of natural radioactivity. The weak force is carried by W⁺, W~ and Z° particles. For seven years, LEP has produced collisions with the right energy to make the Z°, which we now know weighs 91.1884 ± 0.0022 GeV, or about the same as 97 hydrogen atoms. LEP2 will run at around twice this energy, sufficient to produce W⁺ and W~ particles in pairs - a big step forward in CERN's precision studies of the weak force.

Accelerating radiofrequency cavities are LEP's engines, and the transformation to LEP2 was accomplished by adding new superconducting cavities to the machine. Superconducting cavities generate much more acceleration than ordinary copper ones, and use less electricity into the bargain. Last



.. succèdent les sourires sur tous les visages au moment de la détection de la première paire de W *dans le détecteur DELPHI*

... gave way to smiles all round as the first W-pair was detected in the DELPHI detector.

de ces particules, le chargino, pourrait être à la portée du LEP. Quelle que soit la moisson que leur réserve le LEP2, les physiciens de ALEPH, DELPHI, L3 et OPAL ouvrent tout grand les yeux à l'affût de signes révélateurs d'une physique nouvelle.

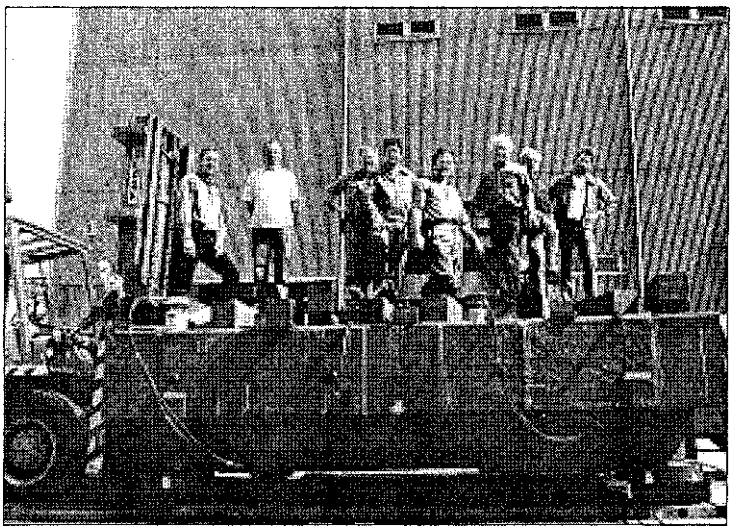
autumn, with 60 superconducting cavities installed, LEP took its first step up in energy, from around 90 GeV to 140 GeV. A further 84 superconducting cavities installed over the winter allowed LEP2 to start up this year with a beam-collision energy of 161 GeV - enough to make W^+W^- particle pairs. By 1998, 128 more superconducting cavities will have been added to LEP, boosting the energy to 192 GeV and maximising the discovery potential of the accelerator.

Every increase in energy brings the possibility of new discoveries or surprises, and physicists are eagerly waiting to see what the revamped LEP will reveal. Perhaps the long sought-after Higgs boson will make its first appearance over the coming years at LEP2? Or maybe evidence for a new and better theory of the Universe will be revealed. Many theoreticians predict that such a theory, called supersymmetry, is just around the corner, and that supersymmetric particles are just waiting to be found. If supersymmetry is correct, one of the lightest of these, the chargino, could be within LEP's reach. Whatever LEP2 may bring, the physicists of ALEPH, DELPHI, L3, and OPAL are keeping their eyes wide open for tell-tale signs of new physics.

Gargamelle, post-scriphim

Un post-scriptum est venu s'inscrire au bas de l'un des grands succès du CERN dans les années 70; la semaine passée en effet la dernière partie, de 170 tonnes, de l'électroaimant de 900 tonnes de Gargamelle a été enlevée du bâtiment 185 afin de laisser la place à un projet de développement pour ATLAS.

Gargamelle avait été fabriquée à Saclay par le Commissariat à l'Energie Atomique français et installée au PS en 1970. Au moment de son entrée en service elle était la plus grand chambre à bulles à liquide dense du monde. Son heure de gloire est arrivée en 1973 avec la découverte des courants neutres prédits par Glashow, Salam et Weinberg dans leur théorie de l'interaction faible qui fut récompensée par un prix Nobel.



Il a fallu deux engins de chantier et 10 hommes pour sortir la base de Vénorme électroaimant de Gargamelle du bâtiment 185. Ce bloc d'acier a été enlevé afin de laisser la place à des travaux de développement pour ATLAS.

Au PS, les mesures effectuées avec Gargamelle ont également permis de confirmer la structure en quarks du proton et l'existence du gluon et fourni en 1975 d'importantes données sur les particules charmées. Après cela Gargamelle a été déménagée dans le faisceau de neutrinos de la zone Ouest du SPS, où son illustre carrière, riche de 4,7 millions de photographies, s'est achevée en 1978. On peut maintenant admirer Gargamelle sur le Square van Hove.

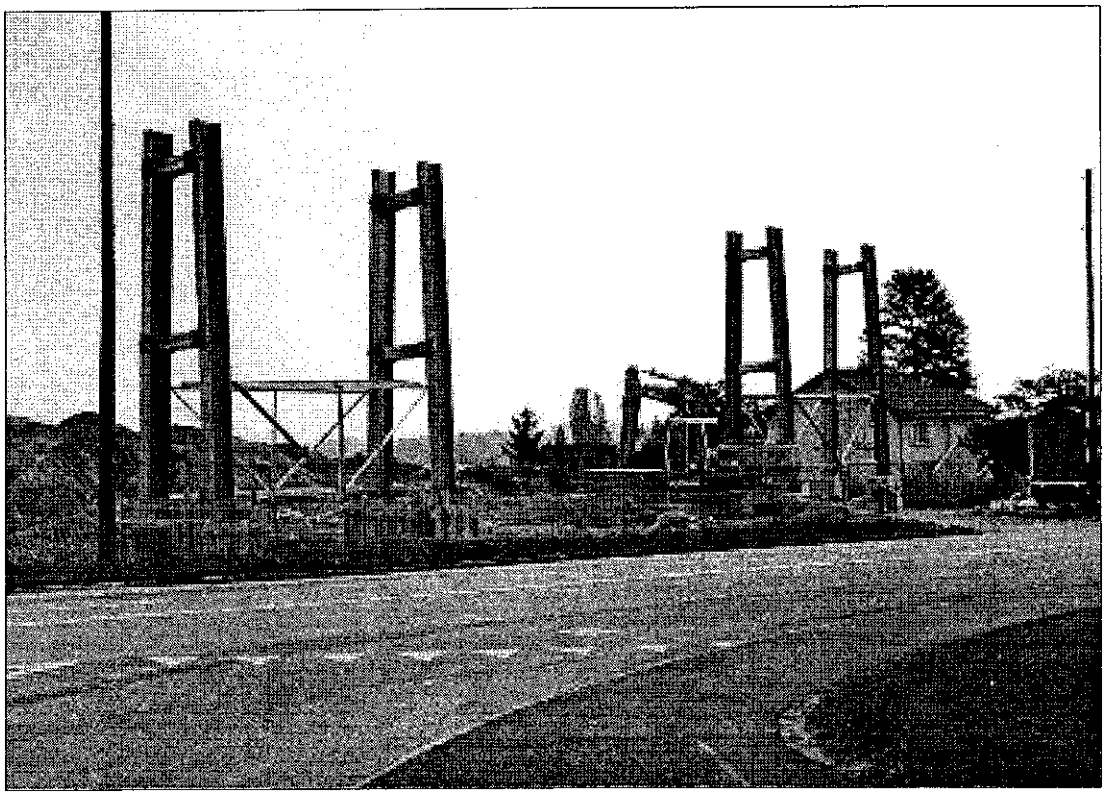
Gargamelle postscript

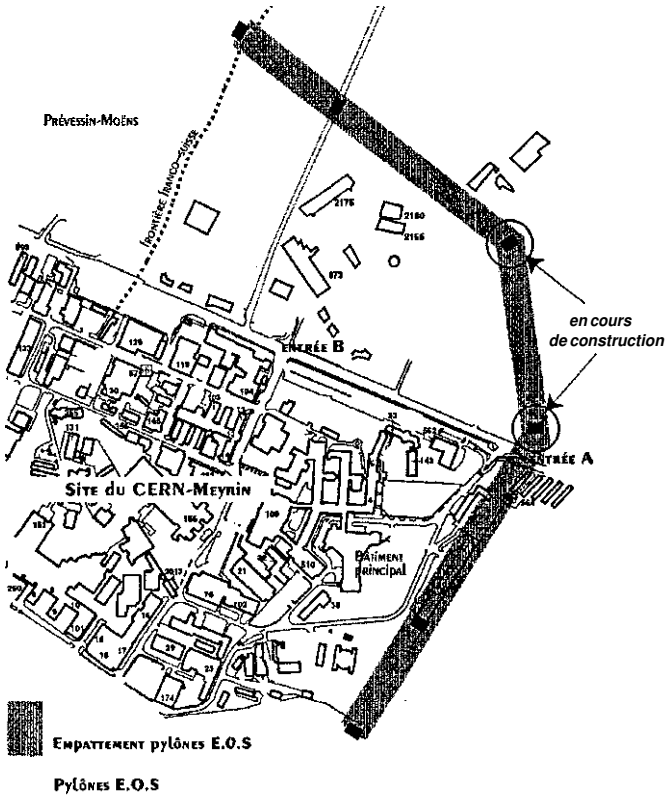
A postscript to a 1970s CERN success story was written last week when the last 170 ton piece of Gargamelle's 900 ton electromagnet was removed from building 185 to make way for an ATLAS development project. It took 10 men three weeks to dismount the huge steel block, which had not been moved for over 20 years.

It took two trucks and 10 men to move the base of Gargamelle's huge electromagnet out of building 185. The 170 ton steel block was moved to make way for ATLAS development work.

Gargamelle was built by the French Commissariat à l'Energie Atomique at their Saclay Laboratory and installed at the PS in 1970. When it began operation, it was the world's largest heavy liquid bubble chamber. Gargamelle's finest hour came in 1973 with the discovery of the neutral currents predicted by Glashow, Salam, and Weinberg in their Nobel prize winning theory of the weak interaction.

Whilst at the PS, Gargamelle also made measurements confirming the quark structure of the proton and the existence of the gluon. In 1975, important measurements were made on charmed particles. After that, Gargamelle was moved to a new home in the SPS West Area neutrino beam, and in 1978, after 4.7 million photographs, the bubble chamber's illustrious career came to an end. Gargamelle can now be seen on display in Square van Hove.





En arrivant de Genève, on est impressionné par les nouveaux pylônes énormes qui sont en voie de construction en face de l'entrée A du CERN.

Ces pylônes serviront à relier au réseau électrique suisse, à Verbois, une ligne transeuropéenne courant au pied du Jura, qui est, pour le moment, interrompue à la fontière franco-suisse à Prévessin. Le raccordement actuellement en cours entre les pylônes dressés par EOS (Energie de l'Ouest Suisse) et ceux d'EDF (Electricité de France), déjà en place à proximité du hall SM 18, s'achèvera cette

La nouvelle ligne de 430 kV nécessite de plus grandes distances de sécurité, d'où des pylônes plus hauts et un écartement accru des lignes.

When approaching CERN from Geneva these days one is impressed by the construction of the enormous new pylons just outside CERN's entrance A.

These pylons are part of the missing link in a trans-European power line running along the foot of the Jura mountains, which for the time being, is waiting at the Swiss-French border at Prevessin to be connected to the Swiss electricity grid at Verbois. The final link-up is now going ahead in Cern's direct vicinity under the auspices of EOS (Energie de l'Ouest de la Suisse) and EdF (Electricité de France), and will be completed this year with the connection of the pylons which are being erected by EOS to the existing pylons belonging to EdF at the Swiss-French border, close to hall SMI 8.

The new line, operating under 430 kV, requires greater safety distances than before. This means higher pylons and greater inter-line distances.

COMMUNICATIONS *OFFICIELLES*

Les membres du personnel sont censés avoir pris connaissance des communications officielles ci-après.

La reproduction même partielle de ces informations par des personnes ou des institutions externes à l'Organisation exige l'approbation préalable de la Direction du CERN.

AVANCEMENT & CHANGEMENT DE FILIÈRE DE CARRIÈRE EXAMEN 1996

Les décisions d'avancement, d'avancement exceptionnel et d'attribution des primes pour services exceptionnels ont maintenant été prises suivant les directives publiées dans le Bulletin hebdomadaire no 13/96 : ces décisions s'appliquent, lorsqu'il y a lieu, aux salaires du mois de juillet 1996. Comme lors des années précédentes, la décision d'octroi de l'échelon annuel est communiquée au personnel par le biais du salaire indiqué sur le décompte de paye du mois de juillet. Toutes les autres décisions sont notifiées séparément aux titulaires concernés, dont une liste nominative peut être consultée au Secrétariat de chaque Division.

Il est rappelé que les propositions de changement de filière de carrière, soumises au Comité pour les carrières d'ingénieurs-techniciens et les carrières administratives (TEACC) ou à la Division du Personnel, sont examinées en vue de préparer les recommandations de ces derniers pour fin septembre 1996. Les décisions finales seront appliquées rétroactivement à compter du 1er juillet 1996.

Division du Personnel
Tél. 74480

EXAMEN 1996 DES CONTRATS DE DUREE INDETERMINEE Catégories professionnelles 2-5

Suite aux recommandations du Comité d'examen des contrats de durée indéterminée et aux discussions au Directoire et au Comité de management, le Directeur général a décidé d'octroyer 46 contrats de durée indéterminée à des titulaires d'un contrat à terme fixe dans les catégories professionnelles 2-5. Dans un cas, la décision est négative et 27 cas sont reportés à l'année prochaine.

Les membres du personnel concernés ont été informés par une notification individuelle.

Division du Personnel
Tél. 74466

OFFICIAL NEWS

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

Reproduction of all or part of this information by persons or institutions external to the Organization requires the prior approval of the CERN management.

ADVANCEMENT & CHANGE OF CAREER PATH 1996 REVIEW

Advancement, exceptional advancement and exceptional performance award decisions have now been made, following the guidelines published in Weekly Bulletin No. 13/96. These decisions are included, where applicable, in the salaries for the month of July 1996. The award of the annual step is communicated to staff, as in past years, by the salary shown on the July salary slip. All other decisions are communicated by separate notification to the staff members concerned, whose names may be consulted in Divisional Secretariats.

It is recalled that change of career path proposals submitted to the Technical Engineers and Administrative Careers Committee (TEACC) or to Personnel Division are being examined with a view to preparing the latter's recommendations by the end of September 1996. Final decisions will be applied retroactively as from 1 July 1996.

Personnel Division
Tel. 74480

INDEFINITE CONTRACT REVIEW 1996 Professional Categories 2-5

Following recommendations of the Indefinite Contract Review Board and discussion at the Directorate and Management Board, the Director-General awarded 46 indefinite contracts to fixed-term staff members in professional categories 2-5. In one case, the decision was negative and 27 other cases were deferred to next year.

All staff members concerned have been informed by individual notification.

Personnel Division
Tel. 74466

SEMINARS
SEMINAIRES

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**

Wednesday 24 July

THEORETICAL SEMINAR

at 14.00 hrs - TH Conference Room

Little miracles of supersymmetric evolution of the gauge couplings

by M. SHIFMAN / CERN

The invention of supersymmetry almost exactly 25 years ago changed the face of high-energy physics. The idea that the observed low-energy gauge groups appear in the process of the spontaneous breaking of a single unifying group G is also quite popular. The synthesis of these two elements results in supersymmetric grand unification. I present (perturbatively) exact results regarding the supersymmetric evolution of the gauge couplings from the scale of their unification to lower scales. In particular, it is shown how the heavy mass thresholds can be properly taken into account.

Friday 19 July

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs - TH Conference Room

Orbital parton motion and QCD evolution of the nucleon's spin

by Pervez HOODBHOY / Quaid-e-Azam University, Islamabad

I shall explore the role of orbital momentum in QCD and, in analogy to the Altarelli-Parisi equation for the quark and gluon helicity contributions to the nucléon spin, derive an evolution equation for the quark and gluon orbital momenta. The solution of the combined equations yields the asymptotic fractions of the nucléon spin carried by quarks and gluons - a result which is model independent and rooted in QCD. I shall further show that the axial-anomaly contribution to the quark helicity is cancelled by a similar contribution to the quark orbital angular momentum, making the total quark contribution to the nucléon spin anomaly-free. Finally, I shall briefly discuss a possible experiment to measure the quark orbital contribution to the proton spin.

EDUCATION
SERVICES
EDUCATIFS

This week

Mon. 22 July	09.15	H.J. Hilke	Particle Detectors (1/6)
	10.15	HJ. Hilke	Particle Detectors (2/6)
	11.15		
		—	
Tue. 23 July	09.15	HJ. Hilke	Particle Detectors (3/6)
	10.15	H.J. Hilke	Particle Detectors (4/6)
	11.15	J. Jowett	Particle Accelerators (1/5)
Wed. 24 July	09.25	J. Jowett	Particle Accelerators (2/5)
	10.15	HJ. Hilke	Particle Dectectors (5/6)
	11.15	M.W. Krasny	Deep Inelastic Lepton Scattering (1/3)

Thii. 1 August	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)
Fri. 2 August	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			
Mon. 5 August	09.15	K. Hubner	New Ideas on Accelerarator Technology (1/1)
	10.15	A. Cohen	A Cosmology Primer (1/3)
	11.15		
Tue. 6 August	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		
Wed. 7 August	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)
Thii. 8 August	09.15	N.N.	History of CERN and its Achievements (1/1)
	10.15	Student Session (1/2)	—
	11.15	Student Session (2/2)	—
Fri. 9 August	09.15	L. Evans	The Large Hadron Collider (1/1)
	10.15	R. Landua	LEAR Physics/A Short Overview (1/2)

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

INFORMATIONS GENERALES
GENERAL *INFORMATION*

NOUVEAU NUMÉRO DE NATEL

Veuillez prendre note que Monsieur E. ROSSO/PPE-TA2 peut être contacté par Natel No 160246 et ne possède plus le beep No. 5050..

GRAPHICAL INTERFACE TO THE CERN LIBRARY CATALOGUE (ALICE) VIA WWW

On Monday 22nd July, we will introduce a new version of the CERN Integrated Library system known as ALICE (not to be confused with the LHC experiment of the same name).

ALICE is a computer-based catalogue of the material held in the CERN library and other material related to HEP; this includes books, reports, journals, preprints and a list of institutes. ALICE currently contains more than 200,000 bibliographic records.

The new version of ALICE offers a WWW interface for searching which is the main reason for the change; we hope that the new interface will be easier to use than the old one and that new functionality such as links to the full-text of documents (where available) will make ALICE a very useful tool.

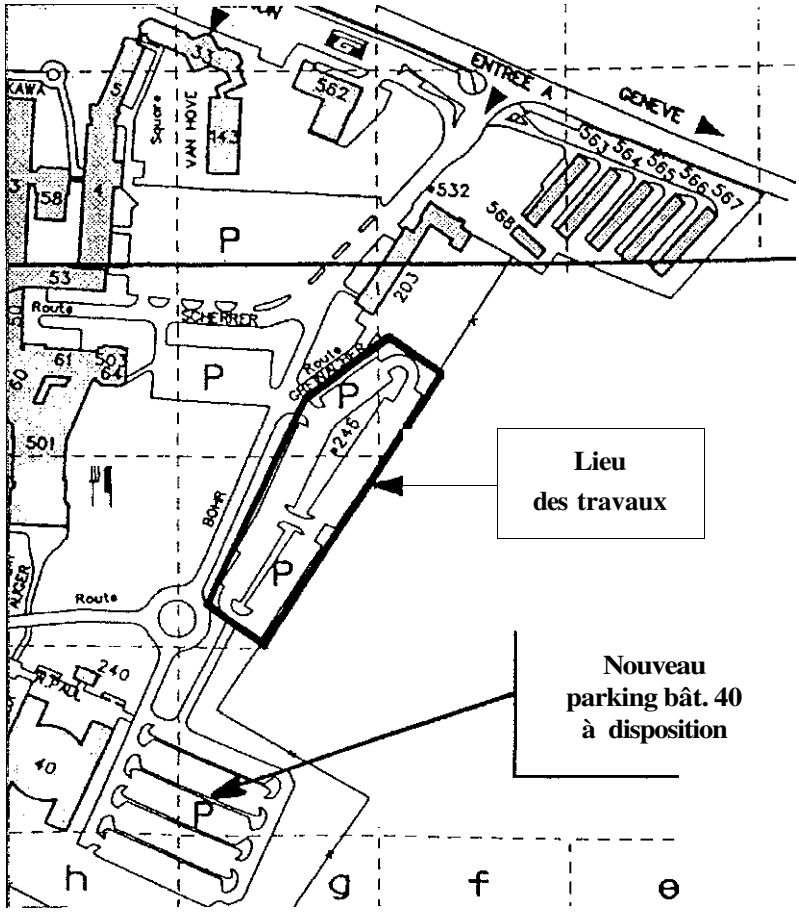
To use the new version of ALICE, point your WWW browser at the following url:

http://alice.cern.ch/

or use the Library or Scientific Information Service link on the CERN home page.

You will also be able to navigate there from the CERN Home page or from the Library Home page.

AS-DH & AS-SI Groups



REFECTION DU PARKING SOUS LA LIGNE 130 KV (ROUTE BOHR)

La première phase d'aménagement des parkings entre l'entrée A et le nouveau bâtiment des physiciens va se terminer par l'ouverture très prochaine du grand parking à côté du nouveau bâtiment 40.

Afin d'améliorer encore la capacité de parking dans cette zone (main building, bâtiment des physiciens, restaurant, etc.) une deuxième phase va se poursuivre durant l'été par la réfection du parking existant sous la ligne électrique 130 kV. Ces travaux vont démarrer d'ici fin juillet et vont durer jusqu'à début octobre. Ils seront coordonnés avec les travaux de continuation de la ligne 400 kV que la Société EOS va effectuer durant la même période.

Pendant ces travaux, le parking sera partiellement, voire totalement fermé aux utilisateurs. Le groupe ST-TFM prie les usagers de bien vouloir l'excuser des désagréments occasionnés et les remercie par avance de leur compréhension.

Division ST - Groupe TFM

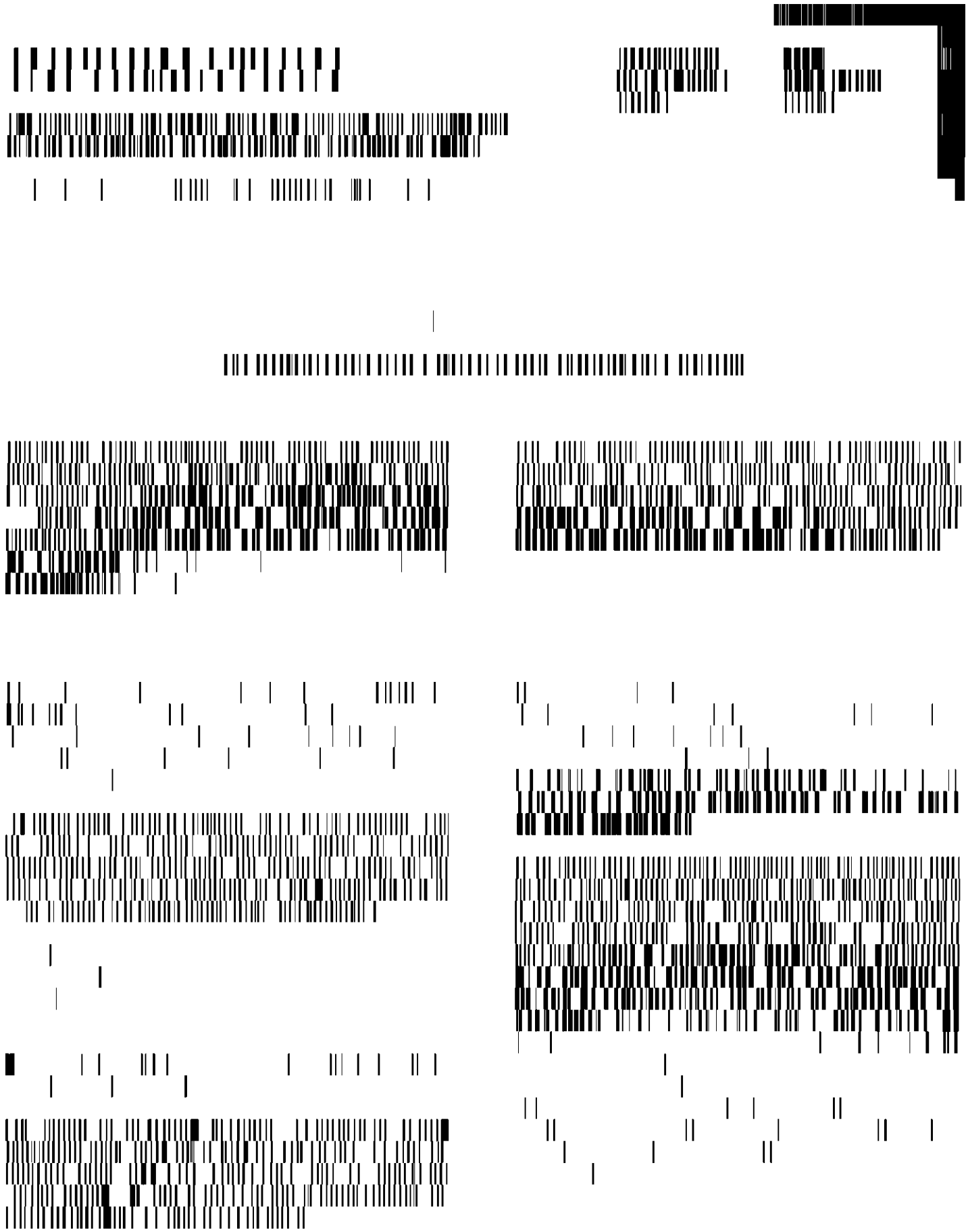
NEW LAYOUT OF THE CAR PARK UNDER THE 130 kV LINE (ROUTE BOHR)

The first stage in laying out the car parks building for physicists will be completed very shortly with the opening of the large car park beside the new building 40.

In order to improve car parking facilities in this area (main building, building for physicists, restaurant, etc.) even further, a second stage will be implemented during the summer with the new layout of the existing car park under the 130 kV power line. Work will be started by the end of July and continue until the beginning of October, and be co-ordinated with the work on extending the 400 kV line, to be done by the EOS during the same period.

The car park will be partly or even completely closed during this work. The ST-TFM Group apologises in advance to users for any inconvenience caused.

ST Division - Group TFM



ORDINARY MEETING OF THE STAFF COUNCIL, 25 JUNE 1996

Summary: activities of the Executive Committee — election of the new President of the Staff Association and new Executive Committee.

The Staff Council met on 25 June at 2 p.m. under the chairmanship of Lorenzo Resegotti.

It first heard a succinct report on the meetings of the Finance Committee and CERN Council. It then heard and discussed a report on recent developments concerning pension guarantees in the event of the dissolution of the Organization. We will return in the near future to this most important question.

The Staff Council then proceeded to the election of the new President of the Staff Association and his Executive Committee. Only one candidate had postulated for President, Michel Vitasse. After having presented his list for the Executive Committee, a list showing his desire for continuity with the previous team, he made a declaration, the first part of which we reproduce below:

"Let's be clear: the future of the Organization and that of its personnel are intimately linked. We want to defend both.

CERN is a recognized model of European International co-operation. It is also recognized as a real centre of excellence. We have doubts that it can remain so. Effectively:

- **We are passing imperceptibly from the stage of cooperation between Member States to one of competition, where they are more concerned with a fair financial return rather than with a real intellectual return. But we cannot have cultural and economic development without a first-rate education based upon high quality fundamental research.**

- **We fear that CERN is losing its independence, losing control of its activities and its own competence due to a policy of reducing considerably the number of its staff combined with a policy of privatization and growing sub-contracting without discussing or defining the principles of this policy.**

- **We fear that CERN will no longer be able to recruit, keep and motivate staff members of the high calibre which it needs in offering to our young colleagues precarious contracts, two or three selection committees, two probation periods before they can obtain a contact with some permanence, degraded salaries, reduced allowances, uncertain retirement, etc.**

This deterioration of the climate and this social degradation which the Organization is installing is going to disrupt the present equilibrium and incite certain extremists with the risk of provoking sabotage or violence inside the Organization.

That is why we believe the Association must take the initiative. All the salaried workers on the site, in their national and social diversity, must join together to establish a social pact which respects the mission of the Organization.

You know we wish to defend the competence and the independence of the international public service and we want to develop and create solidarity:

- **between the younger and the more experienced generations,**
- **between CERN staff and staff of industrial service firms,**
- **between staff members and users,**
- **between workers of international public services.**

That is the reason we have organized our programme along the following four priority axes:

- **Firms,**
- **Creation of employment/Choice in working time,**
- **Strengthening our system of social security,**
- **Relations with the other International Organizations...../....."**

The remaining part of this declaration which develops these four priority axes and the proposed method, will be published later.

The vote has then taken place, and following his election and that of the Executive Committee [see bulletin N- 27, dated 1/7/96], the President-elect has addressed warm thanks to the President, Michel Borghini, for all he has done during many years for the Association and CERN.

Extracts from his allocution [translated by us from the original French]

"During your mandate as President you have shown us the importance not only of having a strategy, but also of being generous, rigorous and persevering."

"If the Staff Association has such a good reputation among the members of the personnel, the Management, the delegates of the Member States and outside of CERN, it is in a large part due to you and the way you have led the Association/'

"In conclusion, noting what you, Michel, have written in the 1995 Annual Report on the lack of a global personnel policy, this leaves us to hope that you will continue with us, to work with your usual perseverance, for the success our actions."

The meeting closed at 4.30 p.m. and was followed by a cocktail to mark the change of Executive Committee.

CLUBS

VÉLO

Prochaines sorties:

SAMEDI 20 JUILLET: sortie le matin à 8h30 ou l'après-midi à 14h00 pour 72 kilomètres dans les vignes, à vous de choisir la période de la journée qui vous arrange, rendez-vous parking piscine Ferney Voltaire.

SAMEDI 27 JUILLET: rendez-vous 13h00 centre du Noirmond pour une ballade 82 kilomètres dans le Jura.

Comme le dit très justement la pub sur les murs à Genève "Sans bidon tes bidon", alors suivez le conseil, car la chaleur est là!!

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

PÉTANQUE

Comme convenu, nous vous rappelons que le dernier jeudi de chaque mois, "LE CLUB DE PÉTANQUE CERN", organise un petit concours interne, ouvert à tous. Tirage à la mêlée. Début des parties à 17h45, sur les terrains du Club (à proximité de la Coopin)

Donc prochaine date à retenir:
JEUDI 25 JUILLET 1996

Veuillez confirmer votre présence à
Claude CERRUTI: 73684 ou courrier électronique
Jean-Claude FROT: 74445, beep 1804
Henri MASSEBOEUF: Natel 16 03 25

Calendrier des prochaines rencontre:
Jeudi 29 AOÛT 1996 à 17h30
Jeudi 26 SEPTEMBRE 1996 à 17h30

GOLF

At approximately the same time as Ian Woosnam was showing the likes of Montgomery, Coltart and Torrance how the game of golf should be played on their home turf in the Scottish Open, our local Welsh Wizard, Peter Jones was doing likewise to 45 members of the CERN golf club. The sloping lies and soaring fairways of the hilly golf course at Mont St Jean in the Jura were no problem at all for Peter, who produced probably the best round of golf in the history of the club! Peter produced a magical round with a brut score of 1 under par, 8 shots better than his handicap and worth 43 Stableford points. As is often the case in golf, his playing partner, HamisK McCombie, was also carried along by the wonder it all and scored an excellent 40 Stableford points. Frank Jouberjean, Les Petty and Bill Hogg scored 39 points.

All in all 8 of the 45 participants bettered or equalled their handicaps.

In the ladies section Marie-Thérèse Coupy scored 34 Stableford points to beat Brenda Fiander and Annika Moy into second and third places.

The full results are as follows:

Yellpw Tees		
1st	**P. Jones**	**43 points**
2nd	**H. McCombie**	**40 points**
3rd	**F. Jouberjean**	**39 points**
4th	**W. Hogg**	**39 points**
5th	**L. Petty**	**39 points**
6th	**C. Frisk**	**37 points**
White Tççs		
1st	**P. Brown**	**36 points**
2nd	**D. Rytz**	**35 points**
3rd	**L. Coull**	**33 points**
Ladies		
1st	**M.T. Coupy**	**34 points**
2nd	**B. Fiander**	**33 points**
3rd	**A. Moy**	**32 points**

CRICKET

CERN CC AT THE ZUOZ
CRICKET FESTIVAL 1996

Despite being understrength, Milan CC decided to spend the weekend with us as CERN had sufficient players available to help out Milan.

On Saturday, CERN batted first and proceeded to bore the scorers to death by scoring only 6 runs in the first 8 overs, losing one wicket in the process. Things did improve somewhat after that with a fine knock of 42 by the Captain, and the CERN inings ended at 101 in the 32nd over. Of note was one of the CERN ringers playing for Milan taking 3 for 14!

Milan's batsmen hardly fared better, only two making it into double figures. Although their runrate was superior to CERN's, they were all out for 48 in the 22nd over, CERN winning by 53 runs. Goodyear took 4 for 16.

The Saturday evening's traditional get together was held at the President's home, and thanks are due to the ladies for providing the meal.

Usually CERN are not in good form after such an evening, but this was not to be the case this time as the innings closed at 163 for 2, Dean 34, Eddy 75 n.o. and Allen 32.

Milan had improved overnight, and succeeded in scoring 127 for 9 in their 35 overs, but were never in the race being consistently behind in runrate. CERN won this match by 36 runs.

Next matches: Swiss League on 20 July at Cossonay, and friendly against Grenoble at Prevessin on 21 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.

YACHTING

Monthly regatta (for August)
Saturday 27 July at 14h30
Inscriptions 12h30 - 13h30
Non Club members with boats very welcome as always

Prochaine régate mensuelle (pour août)
Samedi 27 juillet à 14h30
Inscriptions 12h30 - 13h30
Non membres du Club avec bateaux sont comme toujours bienvenus

Réservez déjà votre week-end du
17 et 18 août
pour notre rallye
"Raz le Bol"

PHILOSOPHY OF NATURAL SCIENCES CLUB

Motivation

Physics is the study of natural phenomena in a qualitative as well as quantitative way. The method has its appeal for other domains of human pursuit. At the present times, where specialisation is at its peak, it is hard to find an opportunity to discuss about the method of physics, its interpretations and implications with people from other disciplines.

We, a group of people of CERN and the University of Geneva, have therefore set up the framework for a new club that shall provide an informal background for discussions, educative seminars, and regular meetings with people from different disciplines.

The club invites speakers to give a seminar at CERN. Each seminar will be followed by a discussion session which is of great importance. Simultaneous translation will be provided.

Tentative Schedule for the 1996-97 Season
(The speakers are to be confirmed)

15 Oct. Science and metaphysics, Jean-Claude Pont (Geneva)
5 Nov. The intellectual content of experimental physics, Val Telegdi (CERN)
26 Nov. "Naturphilosophie" et sciences physiques, Stefano Poggi (Florence)
15 Jan. Logical empiricism, Pierre Jacob (Paris)
4 Feb. Popper and Company, Marco Panza (Nantes)
25 Feb. A propos de Thomas Kuhn, Gilles-Gaston Granger (Paris)
18 Mar. Philosophical aspects of perturbation theory, Jan Lacki (Geneva)
8 Apr. Superconductivity: a history, Alex Miiller (Zurich)
29 Apr. Chaos, a paradigm, Jean-Pierre Eckmann (Geneva)
20 May Immune systems, No name yet
17 June Panel discussion on the first conferences

First General Annual Meeting
The club needs more members. We want to invite every interested person (at CERN or elsewhere) to become member of the club. We shall hold the first general annual meeting on July 31st, 17:30, Bid 4, Room 3-006. With this meeting the club will officially be founded.

As a club member you will be informed about upcoming events. You are also invited to actively participate in the organisation and planning of club activities.

The organising committee
A. Kruse, S. Vascotto, U. Vikas (CERN),
J. Lacki, J.C. Pont (University of Geneva)

Contacts
If you are interested, please send a mail to PhiScLClub@cern.ch and visit the WWW Site http://www.cern.ch/CERN/Clubs/PhiSci for more information.

CLUB DE PHILOSOPHIE DES SCIENCES

Motivation

La physique est l'étude des phénomènes naturels, sur le plan qualitatif autant que quantitatif. La méthode est intéressante dans d'autres domaines de la quête intellectuelle de Fhumanité. Aujourd'hui, où la spécialisation est poussée à l'extrême, il est difficile de trouver des occasions de discuter les méthodes de la physique, leur interprétation et leurs implications, avec des gens d'autres disciplines.

Nous, des gens du CERN et de l'Université de Genève, avons donc établi la structure d'un nouveau Club, qui offrira un cadre informel à des discussions, des séminaires didactiques, ainsi que des rencontres régulières entre personnes de domaines différents.

Le Club invitera des conférenciers à donner un séminaire au CERN. Chaque séminaire sera suivi d'une discussion, qui sera très importante. Une traduction simultanée sera assurée.

Programme provisoire (voir version anglaise)

Réunion générale de fondation
Le Club a besoin de plus de membres. Nous invitons toutes les personnes intéressées (au CERN ou ailleurs) à devenir membres du Club. La première Réunion générale de fondation aura lieu le 31 juillet à 17 h 30, à la salle de conférences TH (Bât. 4 3-006). Lors de cette réunion, le Club sera officiellement fondé. En tant que membres du Club, vous serez informés des événements à venir, vous serez invités à participer activement au planning des événements.

Comité d'organisation
A. Kruse, S. Vascotto, U. Vikas (CERN),
J. Lacki, J.C. Pont (University of Geneva)

Contacts
Si vous êtes intéressés, envoyez un message à PhiSci.club@cern.ch et allez voir le site WWW : http://www.cern.ch/CERN/Clubs/PhiSci/ pour plus d'informations.

CERN

CINE

CLUB

JEUDI 25 JUILLET 1996, A 20h30
THURSDAY 25 JULY 1996, AT 8.30 p.m.

Amphithéâtre Bâtiment Principal / Main Auditorium

THE WEDDING BANQUET
de/of Ang LEE

Wai Tung Gao a quitté la Chine pour faire ses îtudes à New York. Il est devenu un wonder-boy argenté qui vit dans un appartement huppé de Manhattan avec son amant Simon.

Ses parents ignorent son homosexualité et ne cessent de le relancer pour qu'il se marie. Afin d'avoir la paix et pour rendre service à une amie qui a des problèmes de visa, il décide de décide de faire un mariage blanc.

Les époux fantoches doivent se livrer malgré eux aux rituels les plus lourdingues et à toutes sortes de brimades. Ang Lee excelle à montrer comment ces fêtes de famille et ces traditions séculaires sont les véhicules d'une pression sociale fortement normative. Les jeux collectifs du repas de mariage et de la nuit de noces deviennent une sorte de bizutage auquel l'individu doit se soumettre pour obtenir son brevet de bon citoyen, conformément aux vœux d'une société phagocytant l'espace privé.

Wai-Tung Gao left China to study in New-York. He became a wonder-boy with a silver spoon who lived in a super apartment in Manhattan with his lover, Simon.

His parents were unaware of his homosexuality and with their letters they never stop pushing him to get married. In order to find peace and help a friend with a visa problem, he decides to have a paper marriage.

The married couple, in spite of their wishes, become marionettes and are subject to the most ungainly rituals and bulling. Ang Lee excels in showing how ancient traditions and strong customs are vehicles of social pressure. The overall play between the wedding banquet and the wedding night becomes a sort of ragging in which the individual must submit in order to be considered a good citizen according to the wishes of a society that is for ever intruding into personal privacy.

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

Entrée/Entrance CHF 8.-

the Staff CERN Association presents...

CERN HARDRONIC FESTIVAL 96 PROGRAM

Restaurant One Terrasse
Main Building

FRI 19th - Alternative Rock Night

20h00:	BrainStorm	***(power rock)***
22h00:	WOT?!	***(pop rock)***

SAT 20th - 60 s Pop & Rock Night

19h00	JMD Band	***(swing & bossa)***
20h00	The Leaning Towers	***(pop)***
21h00	Still Rockin'	***(rock&roll)***
22h00	Les Horribles Cernettes	***(fun)***
23h00	Joe Killer & I Ruvidi	***(rock)***
OOhOO	Slippin'in	***(blues)***

Free entrance
Beer tents, BBQs, Pizza, etc.

On line broadcast over Internet

the Staff CERN Association *presents...*

FESTIVAL HARDRONIQUE DU CERN 96 PROGRAMME

Restaurant Un, Terrasse
Bâtiment Principal

v/EN 19 - Roque Alternatif

20h00:	Orage Cérébral	***(roque de puissance)***
22h00:	QUOI?!	***(roque populaire)***

SAM 20 - Nuit des années 60

19h00:	JMD et son Orquestre	***(balance & bossa)***
20h00:	Les Tours Penchantes	***(populaire)***
21h00:	Roquan'Toujours	***(roque&roule)***
22h00:	Les Horribles Cernettes	***(bol)***
23h00:	Joe le Tueur & Les Rudes	***(roque)***
OOhOO:	Glissan'dedans	***(bleu)***

Entrée Libre
Tente à Bière, Barbeque, Tarte à la Tomate, etc.

Émission sur le réseau Interfilet

COOPERATIVES

COOPIN (Bât. 563)

Heures d'ouverture du magasin:
lundi au vendredi de 13h00 à 16h30

S 72864 ou 73637.

Rayons chocolats, alcool, tabac, photo, cosmétiques, calculatrice, horlogerie, ménager, hi-fî, jumelles, jouets.

Calculatrices
CASIO et HP
Nous vous proposons:
Calculatrices simples,
scientifiques,
programmables, graphiques.
Agendas électroniques de 32 kb à 256 kb.

Développement photo
Les tirages standards vous sont livrés en 24 heures. Notre action "bon de réduction" pour essayer le service premier (service haut de gamme) continue.

Arrivage des produits
WINSTON (cosmétiques)
Couteaux WENGER
Chocolats LINDT, SUCHARD, NESTLÉ, CAILLER, MAESTRANI, KLAUS...,
Cassettes caméscope BASF, VHF, C ou 8 mm,
Cassettes vidéo.

Gagnez du temps, pensez COOPIN

INTERFON (Bât. 563)

Nous informons nos sociétaires qu'un certain nombre de nos prestataires de service n'ont pas répondu à notre demande de justificatifs d'assurance de la responsabilité civile professionnelle pour 1996 dans leur domaine d'activité (construction, chauffage, sanitaire, peinture, etc.). En conséquence, nous demandons à nos sociétaires de s'informer auprès de notre secrétariat pour vérifier si ce justificatif d'assurance est bien arrivé. Si ce n'était pas le cas Interfon décline toute responsabilité si vous décidez de traiter avec ces prestataires.

Secrétariat, heures d'ouverture:
du lundi au vendredi, de 13h00 à 16h30 U 73339

Magasin, heures d'ouverture:
16h30 - 19h00 (sauf lundi)
9h30 - 12h.00 le samedi *IS* (059) 50 40 88 39

Adresse de notre Magasin:
649, Rue des Alpes, à Moëns.

RESTAURANTS

Plats conventionnés (déjeuner) semaine du 22 juillet

Fixed price main courses (lunch) week of 22 Ju

	No 1 - COOP Bât. 501 - Site Meyrin	No 2 - DSR Bât. 504 - Site Meyrin	No 3 - Gén. de Rest. Bât. 866 - Site Prévessin
Lundi-vendredi Samedi Dimanche	**Heures d'ouverture:** 07h00-01h00 07h00 - 23h00 07h00 - 23h00 **Repas servis:** 11h30-14h00 18h00-20h00 **Prix (FS):** a) 7.40 FS b) 8.70 FS	**Heures d'ouverture:** Q6h3Q- 18h00 Fermé sauf groupes Fermé **Repas servis:** Ilh30-14h00 **Prix (FS):** a) 7.60 FS b) 8.70 FS	**Heures d'ouverture:** 07h00- 18h00 Fermé Fermé **Repas servis:** Ilh30-14h00 **Prix (FF):** a) 21.50 FF b) 25.00 FF
Lundi	a) Cuisse de poulet basquaise Riz safrané b) Filet de carrelet pané Pommes natures Tomate grillée	a) Spaghetti au beurre sauce à l'italienne Salade mêlée b) Sauté de porc aux haricots rouges Riz aux poireaux Maïs étuvé	a) Jambon blanc Madère Haricots verts b) Rôti de boeuf Pommes mousselines Ratatouille
Mardi	a) Calamars sauce piquante Riz blanc Salade verte b) Emincé d'agneau au curry Cornettes Brocolis	a) Beignets d'éperlans sauce tartare Pommes nouvelles Légumes printanier b) Cuisse de poulet sautée sauce hollywood Riz safrané Tomate au four	a) Sauté de dinde au gingembre Carottes b) Échine de porc grillée Torsades au beurre Gratin de courgettes
Mercredi	a) Steak d'agneau haché Graines de couscous Haricots verts b) Poulet rôti Pommes frites Haricots verts	a) Choux farcis de Caroline Pommes sautées Salade de crudité b) Émincé d'autruche sauté sauce Louisiamie Tagliatelle au beurre Haricots verts à l'ail	a) Croustade de fruit de mer Tomates provençale b) Poulet rôti Pommes frites Petits pois
Jeudi	a) Schubling grillé Salade de pommes de terre Salade de haricots verts b) Estouffade de boeuf Pommes mousselines Courgettes	a) Saucisse à rôtir poêlée sauce bâloise Pommes lyonnaise Ratatouille niçoise b) Boeuf sauté à la Yankee Capeletti tricolore Galette texanne	a) Oeufs durs à la moutarde Épinards b) Rôti de veau sauce forestière Semoule Haricots beurre
Vendredi	a) Langue de boeuf aux câpres Pommes boulangères Tomate b) Filet de truite rose Épinards Pommes natures	a) Chili con came du Texas Riz pilaf Salade verte b) Brochette mixed grill de la mer Pommes persillées Épinards en branches	a) Steak haché de boeuf grillé fines herbes Choux de Bruxelles b) Filet de hoki Riz Macédoine

	No 1 - COOP Bldg. 501 - Meyrin Site	No 2 - DSR Bldg. 504 - Meyrin Site	No 3- Gén. de Re Bldg. 866 - Prévessin S
Monday-Friday Saturday Sunday	**Opening times:** Ù7h0Û-01h00 07h00 - 23h00 07h00 - 23h00 **Meals served:** IIh30-14h00 18h00-20h00 **Prices (CHF):** a) 7.40 CHF b) 8.70 CHF	**Opening times:** 06h30- 18h00 Closed except for groups Closed **Meals served:** Ilh30-14h00 **Prices (CHF):** a) 7.60 CHF b) 8.70 CHF	**Opening times:** 07h00-18h00 Closed Closed **Meals served:** Ilh30-14h00 **Prices (FRF):** a) 21.50 FRF b) 25.00
Monday	a) Basque-style chicken leg Saffron rice b) Breaded fillet of brill Boiled potatoes Grilled tomato	a) Buttered spaghetti with spicy tomato sauce and salami Mixed salad b) Stewed pork with red beans Rice with leeks Baked sweetcorn	a) Ham with Madiera sa Green beans b) Roast beef Mashed potatoes Ratatouille
Tuesday	a) Squid in spicy sauce Rice Green salad b) Lamb curry Pasta Broccoli	a) Smelt fish fritters with tartare sauce New potatoes Spring vegetables b) Fried chicken leg with sweet & sour sauce Saffron rice Baked tomatoes	a) Turkey and ginger stir Carrots b) Grilled loin of pork Buttered pasta twists Baked courgettes
Wednesday	a) Minced lamb steak Couscous (wheat) Green beans b) Roast chicken French fried potatoes Green beans	a) Stuffed cabbage Caroline Fried potatoes Mixed salad b) Fried sliced ostrich meat with cajun sauce Buttered tagliatelle French beans	a) Sea food puff Provence-style tomato b) Roast chicken French fried potatoes Peas
Thursday	a) Grilled Swiss sausage Potato salad Green bean salad b) Beef stew Mashed potatoes Courgettes	a) Fried pork sausage with onion sauce Fried potatoes Ratatouille niçoise b) Roast beef Yankee style Buttered pasta Corn pancake	a) Hard-boiled eggs with mustard sauce Spinach b) Roast veal with mush sauce Cracked wheat Yellow beans
Friday	a) Ox tongue with capers Baked sliced potatoes Tomato b) Fillet of pink trout Spinach Boiled potatoes	a) Texan Chili con carne Pilaf Mixed salad b) Sea mixed grill (salmon, shrimps & angler fish) Boiled potatoes Buttered spinach	a) Grilled beef burger wi fine herbs Brussels sprouts b) Fillet of hoki (fish) Rice Diced vegetables

Calendrier hebdomadaire 1996 Weekly Calendar

Lundi / Monday 15.7

A SUMMER STUDENT LECTURES

09.15 Particle Detectors (1/6)
H J. Hilke

10.15 Particle Detectors (2/6)
H.J. Hilke

11.15

[10.00 **CN** **TECHNICAL PRESENTATION**
The Aldor Programming Language : Reconstructing an Algebra System from Elementary Particle
by Stephen WATT / Univ. of Nice-Sophia Antipolis & The Numerical Algorithms Group Ltd (NAG)

Mardi / Tuesday 16.7

A SUMMER STUDENT LECTURES

09.15 Particle Detectors (3/6)
H J. Hilke

10.15 Particle Detectors (4/6)
H.J. Hilke

11.15 Particle Accelerators (1/5)
J. Jowett

Mercredi / Wednesday 17.7

A SUMMER STUDENT LECTURES

09.15 Particle Accelerators (2/5)
J. Jowett

10.15 Particle Dectectors (5/6)
H.J. Hilke

11.15 Deep Inelastic Lepton Scattering (1/3)
M.W. Krasny

114.00 TH **THEORETICAL SEMINAR**
Little miracles of supersymmetric evolution of the gauge couplings
by M SHIFMAN / CERN

Jeudi / Thursday 18.7

A SUMMER STUDENT LECTURES

09.15 Particle Accelerators (3/5)
J. Jowett

10.15 Particle Detectors (6/6)
H.J. Hilke

11.15 Deep Inelastic Lepton Scattering (2/3)
M.W. Krasny

Vendredi / Friday 19.7

A SUMMER STUDENT LECTURES

09.15 Particle Accelerators (4/5)
J. Jowett

10.15 Particle Accelerators (5/5)
J. Jowett

11.15 Deep Inelastic Lepton Scattering (3/3)
M.W. Krasny

14.00 **TH** **MEETING ON PARTICLE PHYSICS PHENOMENOLOGY**
Orbital parton motion and QCD evolution of the nucleon's spin
by Pervez HOODBHOY / Quaid-e-Azam University, Islamabad

22.7

A SUMMER STUDENT LECTURES

09.15 **Off-line Computing from Raw Data to Physics Results (1/3)**
J. Knobloch

10.15 **Current Problems in Neutrino Physics d/6)**
A. Rubbia

11.15 **Current Problems in Neutrino Physics (2/6)**
A. Rubbia

23.7

A SUMMER STUDENT LECTURES

09.15 **Off-line Computing from Raw Data to Physics Results (2/3)**
J. Knobloch

10.15 **CP Violation (1/3)**
K. Peach

11.15 **Current Problems in Neutrino Physics (3/6)**
A. Rubbia

24.7

A SUMMER STUDENT LECTURES

09.15 **Off-line Computing from Raw Data to Physics Results (3/3)**
J. Knobloch

10.15 **CP Violation (2/3)**
K. Peach

11.15 **Current Problems in Neutrino Physics (4/6)**
A. Rubbia

25.7

A SUMMER STUDENT LECTURES

09.15 **Trigger and Data Acquisition (1/3)**
S. Cittolin

10.15 **CP Violation (3/3)**
K. Peach

11.15 **Current Problems in Neutrino Physics (5/6)**
A. Rubbia

26.7

A SUMMER STUDENT LECTURES

09.15 **Trigger and Data Acquisition (2/3)**
S. Cittolin

10.15 **Trigger and Data Acquisition (3/3)**
S. Cittolin

11.15 **Current Problems in Neutrino Physics (6/6)**
A. Rubbia

Auditorium / bldg 500
Amphithéâtre / bât. 500

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

"T/JJ Theory Conference Room / bldg 4
Salle Théorie /bât. 4

Y 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

DG ^ ^ ' ' ' 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-Û9

SL SL Auditorium - Prévessin / bldg 864,1st fl.
Amphithéâtre SL - Prévessin / 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

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. 3475
e-mail : *weekly_bulletin@macmail*
staff_association@macnmil
Dernier délai pour insertions : mardi 12.00 h
Association du Personnel : bât. 64/R-002, tél. 2819
Media & Publications (DSU) : bldg 50/1-034, tel. 3475