

*Traces de particules dans une chambre à bulles à argon enregistrées pour la première fois au SPS.*

*Particle tracks recorded in an argon bubble chamber for the first time at the SPS.*

## Des bulles dans l'argon

La mise hors service de la chambre à bulles en tant que détecteur de particules, qui a été prédite, ne se fera pas encore. Même si les systèmes électroniques peuvent offrir les avantages d'une sélectivité et de plus grandes vitesses de saisie des données, les chambres à bulles continuent d'être utilisées dans les systèmes de détection hybrides, et il en existe maintenant des modèles à cyclage très rapide. Des essais effectués récemment au CERN, au cours desquels on a étudié la possibilité d'utiliser de l'argon comme liquide de chambre à bulles et d'exploiter ses propriétés avantageuses dans un seul ensemble de petites dimensions, laissent prévoir un nouveau développement. L'argon liquide est un scintillateur et l'éclair de lumière provoqué par une particule pourrait servir à déclencher la prise d'une photo de trajectoire. Plutôt que d'entourer la chambre d'équipements électroniques comme dans le cas des systèmes hybrides, on pourrait placer des fils à l'intérieur du réservoir afin de pouvoir obtenir, outre l'image de la trajectoire, des informations sur le contenu énergétique des gerbes de particules. L'argon est inerte, il peut être refroidi à la température voulue au moyen d'azote liquide et ne demande qu'un faible changement de volume pour permettre la formation des traces, de sorte qu'on peut utiliser un système d'expansion semblable à celui d'une chambre à bulles à hydrogène. Si les essais actuels sont couronnés de succès, l'on pourrait envisager d'utiliser de plus grandes chambres remplies d'argon ou d'un mélange d'argon et d'azote, qui rempliraient leur rôle en fournissant des données de physique d'une haute qualité – comme l'ont fait à la perfection leurs prédécesseurs au cours des décennies passées.

## Bubbles in Argon

The predicted demise of the bubble chamber as a particle detector will not take place as yet. Even though electronic devices may offer the advantages of selectivity and higher rates of data taking, bubble chambers continue to serve in hybrid detection systems and now exist in very fast cycling versions. A further advance is foreshadowed by recent tests at CERN, which studied the possibility of using argon as a chamber liquid to exploit its advantageous properties in a single small device. Liquid argon is a scintillator, and the light-flash caused by a particle could be made to trigger the taking of a track photo. Rather than surround the chamber with electronics as in hybrid chambers, wires could be placed inside the tank so that, in addition to the track picture, information on the energy content of particle showers can be obtained. Argon is inert, can be cooled to the right temperature by liquid nitrogen, and needs only a small volume swing for track formation, so that an expansion system similar to that of a hydrogen bubble chamber may be employed. If present tests are successful, the use of larger chambers filled with argon or an argon-nitrogen mixture could be envisaged which would play their part in providing high quality physics data—a role their predecessors performed to perfection in the past decades.

# COMMUNICATIONS **OFFICIELLES**

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

# **OFFICIAL** NEWS

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

---

## RESIDENCE AND WORK PERMITS IN THE HOST STATES

Article 2 - Employment in Switzerland : Non-Swiss Members of the family residing in  
=====

Switzerland or France  
=====

### 1. General

- By letter to CERN dated 17th June 1971 the Swiss Permanent Mission to the International Organisations confirmed that the spouses and children of members of the personnel who wish to take up employment are not subjected to quota limitations imposed on each Canton by the Département Fédéral de Justice et Police, on condition that they reside with the member of the personnel.
- By agreement of 16th November 1972 between the Sous-Préfecture of Gex, the Geneva Contrôle de l'Habitant and CERN, the spouses and children of full-time members of the personnel living in France under the same roof can exercise a professional activity in the Canton of Geneva. By definition this agreement applies to spouses and children holding a French carte de légitimation issued by the French Ministry of Foreign Affairs, for which there is no age limit for daughters but an age maximum of 21 for sons if they are no longer dependent according to CERN regulations. (More detailed information on residence permits in France will be given in a subsequent article.)
- The above agreement did not specifically include Vaud, but CERN has been informed that the same conditions would normally be applicable to that Canton.
- The information in this article concerns employers who do not benefit from federal agreements concerning work permits. International organisations, like CERN, can engage staff without being subject to the above formalities.

### 2. Application Procedures

- In all cases it is the prospective employer who completes and submits the application to the Cantonal authority (Geneva : Contrôle de l'Habitant, Vaud : Police Cantonale des Etrangers).
- For Geneva, the Contrôle de l'Habitant must consult a tri-partite Commission established for the appropriate employment sector (general, medical, education) and composed of representatives of the cantonal authorities and workers' and employers' associations. For Vaud, the Office cantonal du Travail has to be consulted.
- The decision whether or not to authorise the employment is taken according to whether there are other candidates of Swiss nationality or holding 'C' permits ("autorisations d'établissement" as described in Article 1) and to the employment market in the sector concerned. The above procedures normally take 6 to 8 weeks.
- The prospective employer can make an appeal to the Conseil d'Etat against a refusal to grant the permit.

### 3. Type and status of permit

- The permit given (generally known as a 'B' permit) has to be renewed annually.
- It is initially only valid for the employment for which it was given. After 1 year the holder may obtain the agreement of the Cantonal authority to change employment; any such request has to be submitted to the Contrôle de l'Habitant.
- For part-time or vocational work, self-employed activities, etc. the permit may be in the form of a letter of attestation stipulating any special conditions.

- For children the years of residence with a 'B' permit count towards the qualifying period of residence for obtaining a 'C' permit (as described in Article 1). Spouses holding a 'B' permit which has been obtained through the agreements outlined in Para. 1 are not eligible to obtain a 'C' permit after the usual period of 5 to 10 years. Situations where the spouse is no longer covered by a Carte de Légitimation (e.g. after divorce, or death of the Staff Member) will be covered in a future article.
- For spouses and children who reside in France the Swiss Cantonal authorities normally give a "card" of the same kind as for a Frontalier. This is for administrative convenience only and does not imply that the holder is included in the Franco-Swiss frontalier agreements. The status given by this "card" is the same as for persons residing in Switzerland.

#### 4. Apprenticeships

- Children residing in Switzerland or the French frontier zone (including for this purpose Thonon, Evian, Annecy and Bellegarde) may enter into apprenticeships subject to the procedures already described and to the agreement of the Office d'Orientation et de Formation professionnelle.
- On completion of the apprenticeship they can obtain employment without further restrictions (for residents of France this requires the agreement of the French authorities).

#### 5. Part-time work - Students

- University students and those attending colleges of further education may be authorised to work part-time up to 20 hours per week if the institution concerned confirms that this is not incompatible with their studies.
- A permit for full-time vocational work can also be obtained.

#### 6. Part-time work - Spouses

- The Contrôle de l'Habitant can give prior permission (as opposed to a permit) to spouses to work part-time up to 6 hours per week with no further formalities or conditions.

#### 7. Professions subject to restrictions

- Restrictions exist for certain professions (e.g. medicine, state school teaching, law, civil service functions, etc.) for which Swiss nationality and/or particular qualifications may be required. Nevertheless, exceptions have been known.

#### 8. Self-employed activities

- By application to the Contrôle de l'Habitant permission may be given for certain self-employed activities undertaken at home such as dress-making, private language lessons, etc.
- CERN does not have information on the formalities and possibilities of establishing a business.

#### 9. Income Tax

- In the case of a spouse's taxable income it is the husband who is regarded as the tax-payer as far as Swiss income tax is concerned. If he is the CERN member of the personnel he is not required to declare his CERN income, in which case the spouse's income is taxed at the single person's rate. Questions concerning income tax in France should be addressed to J.F. Barthélemy, PE Division.

#### 10. Social Security

- Unless the employer has exemption, the spouse's or child's employment involves obligatory membership of AVS/AI. Since, under AVS/AI, pension benefits for a couple are calculated on the husband's contributions, a wife would not be eligible to receive a pension despite her contributions, if her husband is a member of the CERN personnel.
- Children's contributions give entitlement to a pension and may be covered by a bilateral agreement between Switzerland and the country of nationality. Otherwise, on leaving Switzerland, a reimbursement of AVS contributions can be made.

## 11. Final observations

- It is an important advantage that the engagement of a family member of a member of the CERN personnel is not counted against the employer's quota of posts for foreigners. Applications can therefore be made even when an advertisement stipulates that candidates must have Swiss nationality or a 'C' permit.
- The Social Work Section will provide suitable attestations to be shown to a prospective employer who may not be aware of the status of the member of the family of a CERN employee.
- A refusal by the authorities for one employment should not be regarded as the last possibility. A subsequent application for a different job may still be successful. Whilst no statistics are available, there is evidence that a good number of spouses and children have succeeded in obtaining employment in the Geneva area.

Social Work Section  
Tel. 4201

## TRAINING AND **EDUCATION** **ENSEIGNEMENT**

---

### SUMMER STUDENT LECTURES

			5.8	8.30	G. Stevenson - "Radiation protection in accelerator environments"
				10.00	D. Treille - "Exploration of the nucleon structure with electro-magnetic and weak probes" (2)
				11.15	-
28.7 -	8.30	-			
	10.00	-			
	11.15	V.F. Weisskopf - "Particles and symmetries" (5)	6.8	8.30	H. Grote - "Data handling for electronic experiments" (1)
				10.00	D. Treille - "Exploration of the nucleon structure with electro-magnetic and weak probes" (3)
29.7	8.30	-		11.15	-
	10.00	-			
	11.15	V.F. Weisskopf - "Particles and symmetries" (6)	7.8	8.30	H. Grote - "Data handling for electronic experiments" (2)
30.7	8.30	-		10.00	D. Treille - "Exploration of the nucleon structure with electro-magnetic and weak probes" (4)
	10.00	-		11.15	C. Baltay - "Neutrino physics in a bubble chamber"
	11.15	V.F. Weisskopf - "Particles and symmetries" (7)			
31.7	8.30	-	8.8	8.30	K.H. Mess - "A large neutrino experiment : why and how"
	10.00	-		10.00	D. Treille - "Unification of weak and electromagnetic interactions" (5)
	11.15	V.F. Weisskopf - "Particles and symmetries" (8)		11.15	D. Treille - "Proton lifetime" (6)
<i>Next week :</i>					
4.8	8.30	-			
	10.00	D. Treille - "Exploration of the nucleon structure with electro-magnetic and weak probes" (1)	All the lectures are given in English and held in the Auditorium.		
	11.15	C.N. Yang - "The influence of Einstein on contemporary physics"			
					Fellows and Associates Service/ Tel. 4471

## R A P P E L :

### ENSEIGNEMENT TECHNIQUE

La brochure "Enseignement Technique - Programme 1980-1981 est actuellement disponible. Vous pouvez en obtenir un exemplaire soit en retournant la carte de commande qui a été distribuée à tous les membres du personnel, soit en remplissant et renvoyant le coupon ci-dessous.

Cette brochure contient la description détaillée des cours organisés à l'intention du personnel.

Le programme comporte cette année les cours suivants :

#### MATHEMATIQUES - PHYSIQUE

Ateliers de mathématiques  
Quelques expériences en physique des particules  
Aspects physiques et pratiques des problèmes d'énergie  
Haute fréquence; applications aux accélérateurs  
Champs magnétiques et aimants  
Effets biologiques des radiations; applications à la radioprotection et à la radiothérapie

#### ELECTRONIQUE

Laboratoire d'études électroniques  
Systèmes logiques programmés  
Systèmes non-linéaires et échantillonnés

#### INFORMATIQUE

Initiation à l'informatique et aux techniques de programmation  
Introduction à la programmation de microprocesseurs  
Microprocessor workshop  
Techniques de programmation de mini-ordinateurs  
Programmation en PASCAL

#### MECANIQUE ET MECANICIENS

Technique du vide  
Electromécanique  
Analyse et méthodes de construction mécanique

#### ADMINISTRATION

Techniques pour travaux administratifs  
Informatique administrative : introduction à INFOL  
Informatique administrative : introduction à WYLBUR

DELAI D'INSCRIPTION : 29 AOUT 1980

La brochure peut être également consultée dans les Secrétariats de Divisions.



A : Secrétariat de l'Enseignement Technique

Veuillez m'envoyer une brochure "Enseignement Technique - Programme 1980-1981".

Nom et prénom :

Division :

# SEMINARS SEMINAIRES

## WEDNESDAY 30 JULY

### THEORETICAL SEMINAR

14.00 hrs - Theory Conference Room

"Phase transition to quark matter"

by J. Rafelski / Frankfurt

*Abstract : In a thermodynamic description of a gas of quark bags the phase transition to quark matter is studied and found either at high baryonic density (neutron stars) or high temperature attainable in relativistic nuclear collisions and  $\bar{p}$ -annihilation on nuclei. Possible experimental manifestations of quark matter are discussed.*

## THURSDAY 31 JULY

### ESO ASTROPHYSICS SEMINAR

at 14.00 hrs - DD Auditorium  
(Bldg.31 - 3rd floor)

"Formation and Evolution of Galaxies in Cluster"

by A. Dressler / Hale Observatories

*Abstract : Discussion of the morphological variations of galaxies in and out of clusters and relevance of these observations to the theories of galaxy differentiation.*

## MONDAY 4 AUGUST

### ISR SEMINAR

at 14.30 hrs - ISR Auditorium  
(Top floor of Building 30)

"The TPC Magnet and its Associated Cryogenics"

by M.A. Green / Karlsruhe and LBL

## FRIDAY 8 AUGUST

### CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs - Auditorium

"The present status of PEP, and what's new with the tau-lepton"

by M. Perl / Stanford Linear Accelerator Center

# INFORMATIONS GENERALES

## GENERAL INFORMATION

---

### CHANGE OF OFFICE

---

Would you please note that Dr. E. PICASSO has moved to Building 112, Office 2-021. His telephone numbers are : 3198 - 3254 - 2318.

### AGENCES SBS

En raison de la Fête Nationale Suisse, les deux agences SBS sur le site seront fermées toute la journée en date du

vendredi 1er août 1980.

Division du Personnel / 4151

### LE RAPPORT ANNUEL DU CERN EST PARU

---

Les éditions française et anglaise du Rapport annuel 1979 sont disponibles aux endroits suivants:

- Secrétariats des Divisions
- Bibliothèques centrale et du SPS,
- Self-service du Bureau de Documentation (Bât.64, R-002), derrière le guichet de réception du Bâtiment de l'Administration/Restaurant n° 1.

### NOUVELLES PUBLICATIONS

---

- "Lew Kowarski, 1907-1979" (en français). Cette brochure contient le texte des conférences prononcées lors de la cérémonie organisée au CERN, en décembre dernier, à la mémoire de Lew Kowarski.
- "Some Important Physics Results" (en anglais). Cette publication décrit les étapes importantes de la physique au CERN. Il s'agit d'une pochette renfermant des textes imprimés sur des cahiers volants. Les six chapitres de la première édition, sortie en 1978, traitent des courants neutres, des expériences g-2, des atomes exotiques, de la structure du proton, des familles de particules et des kaons neutres. Viennent s'y ajouter maintenant deux sujets nouveaux : la physique du neutrino au SPS et la physique nucléaire à ISOLDE. Chacun de ces deux chapitres peut également être fourni séparément. Leur version française est en préparation; elle paraîtra prochainement.

Ces publications sont à disposition en self-service au Bureau de Documentation (Bât.64, R-002, derrière le guichet de Réception du Bât. de l'Administration/Restaurant No.1).

### A TOUT LE PERSONNEL TRAVAILLANT SUR LE SITE DE PREVESSIN : REMPLACEMENT DES FEUX TRICOLORES A L'ENTREE DU SPS

Des travaux ont débuté le 23.07.80 pour procéder au remplacement des feux tricolores au carrefour du CD35 avec l'entrée du SPS.

Des rétrécissements de chaussée seront nécessaires pour permettre la mise en place des nouvelles boucles d'alimentation, et pendant cette période la circulation sera fortement perturbée.

Nous vous demandons de redoubler de prudence et vous remercions d'avance de votre collaboration.

H. Horisberger

### SBS AGENCIES

Owing to the Swiss National Holiday, the two SBS agencies on the CERN site will be closed all day on

Friday, 1st August 1980.

Personnel Division / 4151

### NEW EDITION OF CERN ANNUAL REPORT

---

The 1979 edition of the CERN Annual Report in French and English editions has now been published. It is available from :

- Divisional Secretariats
- Central and SPS Libraries
- The self-service documentation office, Building 64, Room R-002, behind the information desk near the entrance to the Administration Building/Restaurant No.1.

### NEW PUBLICATIONS

---

- "Lew Kowarski, 1907-1979". This 24-page booklet contains the speeches (in French) made at the Lew Kowarski memorial meeting held at CERN last December.
- "Some Important Physics Results". This publication, which first appeared in 1978, describes in a fairly simple way some of the milestones in physics at CERN. The first edition was prepared as a loose-leaf folder containing six chapters, covering the neutral currents, the g-2 experiments, exotic atoms, proton structure, particle families and the neutral kaons. The new edition contains two additional chapters, on neutrino physics at the SPS, and nuclear physics at ISOLDE. To enable those with the old edition to update their folders, the two new chapters are also available separately. For the moment this new edition is only available in English. The French version is in preparation.

These publications are available from the self-service Documentation Office (Building 64, Room R-002, behind the Information Desk near the entrance to the Administration Building/Restaurant No.1).

# Plats du jour des restaurants

Semaine du 28 juillet au 1er août 1980

<i>Midi/Lunch Time</i>	<b>No. 1</b> <i>Bâtiment Administratif Administration Building Meyrin (CH)</i>	<b>No. 2</b> <i>Bâtiment 504 Building 504 Meyrin (CH)</i>	<b>No.3</b> <i>Bâtiment 866 Building 866 Prévessin (F)</i>
<i>Prix</i>	<i>I 4,50Fr.s.II 5,10 Fr.s.</i>	<i>I 4,80Fr.s.II 5,50Fr.s.</i>	FF. 11,30
<b>LUNDI/ MONDAY</b>	I Raviolis au Parmesan  II Sauté de Boeuf aux Poivrons	I Spaghetti Bolognaise  II Lapin au Vin Blanc Pommes Mousseline Légumes	Fricandeau Pommes Nouvelles Haricots Verts
<b>MARDI/ TUESDAY</b>	I Saucisse de Veau Grillée  II Soupe des Pêcheurs	I Saucisse de Veau Garnie  II Steak sur le Grill Pommes Frites Légumes	Boeuf Braisé Pommes Boulangères Légumes Saison
<b>MERCREDI/ WEDNESDAY</b>	I Jambon aux Epinards  II Hamburger Oeuf à Cheval Pommes Parmentier Salade Verte	I Omelette Fines Herbes  II Emincé de Porc Mexicaine Riz Pilaf Légumes	Colin Pané Riz Petits Pois
<b>JEUDI/ THURSDAY</b>	I Emincé de Foie de Porc Bercy Riz Pilaw  II Escalope de Porc Viennoise Spaghetti Sauce Tomate	I Tête de Veau Vinaigrette  II Truite Meunière Pommes Persillées Légumes	Rôti de Porc Pommes Purée Légumes Saison
<b>VENDREDI/ FRIDAY</b>	I Tripes Milanaises Pommes Nature  II La Marée du Jour Garnie	I Croquettes de Poisson Sauce Tartare  II Rognons Flambés Maison Nouillettes au Beurre Légumes	Poulet Rôti Coquillettes Salade Saison

*Heures  
d'ouverture*

Restaurant No.1

Lundi au Vendredi :

06h à 02h30

Samedi et Dimanche :

1. Cafétaria : 08h à 20h

2. Restaurant : 11h30 à 14h

18h00 à 19h30

Restaurant No.2

Lundi au Vendredi :

06h à 20h30

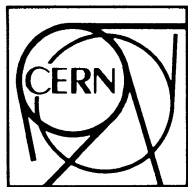
Samedi :

08h00 à 14h00

Restaurant No.3

Lundi au Vendredi :

07h00 à 20h00



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

## STAFF ASSOCIATION

The information presented in the Staff Association section of the Bulletin is published under the sole responsibility of the CERN Staff Association.

### PENSIONS - THE POSITION SO FAR

*CERN's work is such that it requires highly qualified personnel at all levels.*

*The most recent example of this is the completion in record time of the unique antiproton accumulator ring (AA).*

*CERN must be attractive enough in comparison to national employers in the Member States for personnel to be willing to leave their social, professional and cultural environment and come here.*

*In the sixties that was the case !*

*But the situation has seriously deteriorated in the last few years.*

*The application of the index for salaries and allowances has often been refused, with the result that purchasing power has dropped in some cases by as much as 11%, plus a further reduction for the senior grades of up to 10%.*

*The indemnity for the suppression of post, which is seen by the personnel as its only financial guarantee if the Laboratory were to close either completely or partially, has been severely cut (for new recruits).*

*A reduction of the non-resident allowance is being discussed even before the problem of permits for residence and work for CERN staff and their families has been resolved.*

\* \* \* \* \*

1. Pensions are a very important part of our working and social conditions and, as such, they were included in the RESCO review.

The RESCO Subgroup on Pensions compared the level of pensions in the Coordinated Organizations (CO), the European Communities (EC) and at CERN.

As RESCO completed its work in December 1979, the Subgroup has not had time to work out a solution to the problem of CERN pensions which are substantially lower than the others considered.

2. All the conditions reviewed by RESCO are considered by CERN personnel to be a single package which must be dealt with as a whole.

Some of our demands on working conditions have been rejected and the new salary scale is below that requested by the Staff Association and the CERN Management. To offset the Council's rejection of these items in December 1979, we now expect fair pensions.

3. A working group (consisting of Burger, DEKKERS\*, DUFOUR, MAURIN\*, RAYSON, ROCHE, RUFER, ULLMANN and ZILVERSCHOON [chairman]) was set up in February 1980 to draw up recommendations on improved pension rights.

The Association considers that a satisfactory and lasting solution must be found for the following points :

- a) the level of pensions
- b) the payment of family allowances to pensioners
- c) the guarantee of payments (in the event of some or all Member States withdrawing from CERN)
- d) indexation
- e) health insurance for pensioners at reasonable premiums
- f) reimbursement to pensioners of education fees for dependent children

The Working Group has submitted its recommendations on items a) b) and f) (cf the Official News in this edition of the Bulletin).

Items d) and e) are, to varying degrees, satisfactorily settled but still without guarantee.

These items therefore still need further study, as does items c).

\* Staff Association representatives



4. In drawing up its recommendation on pension levels, the Working Group compared the income of pensioners of the Services Industriels in Geneva (SIG, which is the official reference for salaries of grades 2 to 8) the CO, EC and CERN. The Group took into account pensioners' total income, including, therefore, where appropriate, the AVS (the first "pillar" of Swiss pensions) as well as the family and dependent children's allowances.

The result is given in Tables I to IV available from your Staff Council member.

The recommendations are based on the following simple criteria :

- a) net income for CERN pensioners to be the same as that received by the reference groups;
  - b) contribution by the CERN personnel to the pension scheme to be the same as that paid by the reference groups ;
  - c) the funding of the scheme should not jeopardize the efficiency of the CERN Staff Insurance Scheme nor should it place an excessive burden on the Organization's annual budgets.
5. The Executive Committee considers that the unanimous recommendations of the Working Group on Pensions are fair and within the means of all concerned. They are as follows :
- the net income of CERN pensioners (both present and future) to be brought into line with that of the reference groups ;
  - the personnel to be asked to make the same contribution as the reference groups (8,2% of salary to bring contributions into line with SIG and CO) for a 40% increase in pensions ;
  - pensioners' extra income to be financed from CERN's annual budgets and the increased contributions.

The Executive Committee will make every effort to see that these recommendations are applied from 1 January 1981.

The Executive Committee would like to emphasize that, under the Agreements with the Host States, the Organization has the obligation to assure CERN personnel of social protection at least equivalent to that provided in the Host State where the Organization has its Headquarters, i.e. in Switzerland\*, and that, in the event of the dissolution of the Organization, the Member States have the obligation to guarantee the payment of pensions until the cessation of entitlement of the last beneficiary.

JOIN FORCES AND FIGHT TOGETHER ON THIS VITAL ISSUE !

---

\* Article 21 of the Agreements of 11 June 1955 and 30 December 1970.

# CLUBS

---

## YACHTING CLUB

### RESULTATS DE LA MUFFIN CUP DU 19 JUILLET 1980

1. GESCHONKE/SEEBER sur 420 en 131 minutes
2. MOMEUX/BAL sur 485 en 132 "
3. HUBER/GRIER sur 420 en 133 "
4. RABAR/VAN DER VLUGT sur 485 en 185 minutes

3 abandons, 2 chavirages

PROCHAINE REGATE LE SAMEDI 9 AOUT 1980

## GAMES CLUB - BRIDGE SECTION

The winners of last weeks duplicate were :

- |     |                     |     |
|-----|---------------------|-----|
| 1st | GRAJEW and BRESLIN  | 57% |
| 2nd | SELWOOD and SELWOOD | 56% |
| 3rd | MAROZZI and MOLZON  | 56% |
| 4th | LUCHMANN and SIMON  | 54% |

Please send to D. KEMP/ISR



-----  
I shall be playing Wednesday 30th July

Name.....Partner.....

Tortella's canteen 7.55 pm sharp

Everybody welcome  
-----

## VELO CLUB

### DIMANCHE 27 JUILLET 1980 - PIQUE-NIQUE FAMILIAL

Pique-nique en famille, ce dimanche, dans le Jura selon le programme suivant :

Lieu de ralliement et pique-nique (dès 12h00 heure suisse) à 4kms après LAJOUX, direction St. Claude (D 436, Maison "La Sauvagère")

Programme vélo (on en fera quand même !)

- Parcours No 1 : 101 kms  
Départ à 7h30 heure suisse  
au lieu cité plus haut
- Parcours No 2 : 50 kms  
Départ 9h00 heure suisse
- Parcours No 3 : 25 kms  
Départ à 10h heure suisse

Venez nombreux en apportant :

- 1) votre pique-nique
- 2) des jeux de plein air
- 3) votre bonne humeur habituelle

A dimanche

le Comité.

# COOPERATIVES

---

## INTERFON

GEX MATERIAUX : Afin d'éviter les erreurs d'imputation de numéro de carte, ce fournisseur exige la présentation de la carte à chaque commande.

ASSURANCE COMPLEMENTAIRE : Il n'y aura pas de permanence les jeudis 24 et 31 juillet, 14 et 21 août 1980.

PERMO : Protégez vos canalisations, vos chauffe eaux et votre linge en installant un adoucisseur d'eau PERMO en stock au magasin actuellement au magasin à un prix très intéressant.

## CALENDRIER HEBDOMADAIRE

1980

## WEEKLY CALENDAR

LUNDI MONDAY	MARDI TUESDAY	MERCREDI WEDNESDAY	JEUDI THURSDAY	VENDREDI FRIDAY
28.7	29.7	30.7	31.7	1.8
1115 SUMMER STUDENT LECTURE Particles and symmetries - by V.F. Weisskopf (5)	1115 SUMMER STUDENT LECTURE Particles and symmetries - by V.F. Weisskopf (6)	1115 SUMMER STUDENT LECTURE Particles and symmetries - by V.F. Weisskopf (7)	1115 SUMMER STUDENT LECTURE Particles and symmetries - by V.F. Weisskopf (8)	
		1400 THEORETICAL SEMINAR Phase transition to quark matter - by J. Rafelski / Frankfurt	1400 ESO ASTROPHYSICS SEMINAR Formation and evolution of galaxies in cluster - by A. Dressler / Hale Observatories	
4.8	5.8	6.8	7.8	8.8
1000 SUMMER STUDENT LECTURE Exploration of the nucleon struc- ture with electromagnetic and weak probes - by D. Treille (1)	830 SUMMER STUDENT LECTURE Radiation protection in accelerator environments - by G. Stevenson	830 SUMMER STUDENT LECTURE Data handling for electronic experiments - by H. Grote (1)	830 SUMMER STUDENT LECTURE Data handling for electronic experiments - by H. Grote (2)	830 SUMMER STUDENT LECTURE A large neutrino experiment : why and how - by K.H. Mess
1115 SUMMER STUDENT LECTURE The influence of Einstein on contemporary physics - by C.N. Yang	1000 SUMMER STUDENT LECTURE Exploration of the nucleon struc- ture with electromagnetic and weak probes - by D. Treille (2)	1000 SUMMER STUDENT LECTURE Exploration of the nucleon struc- ture with electromagnetic and weak probes - by D. Treille (3)	1000 SUMMER STUDENT LECTURE Exploration of the nucleon struc- ture with electromagnetic and weak probes - by D. Treille (4)	1000 SUMMER STUDENT LECTURE Unification of weak and electro- magnetic interactions - by D. Treille (5)
1430 ISR SEMINAR The IPC magnet and its associated cryogenics - by M.A. Green / Karlsruhe and LBL			1115 SUMMER STUDENT LECTURE Neutrino physics in a bubble chamber - by C. Baltay	1115 SUMMER STUDENT LECTURE Proton lifetime - by D. Treille (6)
				1630 CERN PARTICLE PHYSICS SEMINAR The present status of PEP, and what's new with the tau-lepton - by M. Perl / Stanford Linear Accelerator Center

Amphithéâtre/bât. Auditorium/bdg. 500	Salle Thénée/bât. Theory lecture room/bdg. 4	Sixth Floor Conference Room Salle de conférence du sixième ét. ADM/bât. ADM	DD Auditorium Amphithéâtre DD	DD Auditorium bldg. 31.3rd fl. bât. 31.3 <sup>e</sup> ét.	Deadline for insertions : Tuesday 12.00 hours Staff Association (Wilson Hut) - Tél. 2819 Publications Group (DD) - Tél. 4106-3586-2755
Salle du Conseil/bât. Council Chamber/bdg. 503	Amphithéâtre des ISR/bât. 30.7 <sup>e</sup> ét. ISR Auditorium/bdg. 30.7th fl.	SPS Auditorium Amphithéâtre SPS			Dernier délai pour insertions : mardi 12 h 00 Association du Personnel (Bar. Wilson) - Tél. 2819 Groupe des Publications (DD) - Tél. 4106-3586-2755