

First Pb-ion acceleration of Radio Frequency Quadrupole (RFQ)

On Friday 30 April the lead ion acceleration project which prepares the ground for the new heavy ion physics program in CERN's large accelerators met a new milestone :

The Radio Frequency Quadrupole (RFQ) accelerator which has been supplied by the INFN, Laboratori Nazionali di Legnaro in the first half of April has been put into operation successfully. It accelerates Pb²⁷ ions from 2.5 keV/u to 250 keV/u and the beam has been observed at the output. In the following days the medium energy beam transport line (MEBT) after the RFQ has also operated the first time and a beam current of 70 micro Amp been measured after acceleration.

A new bunch length & velocity detector (BLVD) built by the Institute of Nuclear Research (INR) Moscow has been put into operation and it confirmed by a rough velocity measurement that the beam has 244 keV/u energy not far from the expected RFQ energy.

Première accélération d'ions plomb par le quadrupôle radiofréquence (RFQ)

Le vendredi 30 avril, une nouvelle étape majeure a été franchie par le programme d'accélération d'ions plomb, qui prépare le terrain au nouveau programme de physique avec des ions lourds dans les grands accélérateurs du CERN :

Le quadrupôle accélérateur radiofréquence (RFQ), qui a été fourni par les Laboratoires nationaux de l'INFN à Légrare dans la première moitié du mois d'avril, a été mis en service avec succès. Il accélère des ions Pb²⁷ de 2,5 keV/u à 250 keV/u, et le faisceau a été observé à la sortie. Dans les jours suivants, la ligne de transport de faisceau à moyenne énergie (MEBT) placée après l'aimant RFQ a fonctionné également pour la première fois et un courant de faisceau de 70 microampères a été mesuré après l'accélération.

Un nouveau détecteur de vitesse et de longueur des paquets (BLVD) construit par l'Institut de recherche nucléaire (IRN) de Moscou a été mis en service et il a confirmé, par une mesure approximative de la vitesse, que le faisceau possédait une énergie de 244 keV/u qui n'est pas éloignée de l'énergie attendue avec l'aimant RFQ.

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.

MEMBRES DE LA FAMILLE DES FONCTIONNAIRES ET RETRAITÉS AUTRES QUE FRANÇAIS

De nouvelles dispositions importantes viennent d'entrer en vigueur concernant les membres de la famille des fonctionnaires et les retraités de l'Organisation.

1. Membres de la famille résidant en France

- 1.1 Jusqu'à présent, le conjoint et les enfants d'un membre du personnel pouvaient résider en France et travailler en Suisse si les conditions suivantes étaient remplies: vivre sous le même toit que le fonctionnaire et être en possession d'une carte spéciale délivrée par le Ministère des Affaires étrangères. Cette facilité cessait en cas de départ du fonctionnaire, de son décès ou de divorce.
- 1.2 Désormais, toute personne ressortissante d'un des pays de l'Espace Economique Européen membre du CERN (Allemagne, Autriche, Belgique, Danemark, Espagne, Finlande, Grèce, Italie, Norvège, Pays-Bas, Portugal, Royaume-Uni, Suède) peut résider en France et travailler en Suisse si toutes les conditions suivantes sont remplies: justifier pour elle-même, son conjoint, ses descendants et ascendants à charge, d'une assurance couvrant l'ensemble des risques maladie et maternité auxquels ils peuvent être exposés durant leur séjour en France et disposer de ressources suffisantes (montant explicité dans le texte légal français).

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.

FAMILY MEMBERS OF OFFICIALS AND PENSIONERS WHO ARE NOT FRENCH NATIONALS

Important new provisions have just come into force concerning members of families of officials and pensioners of the Organization.

1. Members of family resident in France

- 1.1 Up to now the spouse and children of a member of the personnel could reside in France and work in Switzerland provided that the following conditions were fulfilled: they had to live under the same roof as the official and be in possession of a "carte spéciale" issued by the Ministry of Foreign Affairs. This entitlement came to an end in the event of the official's departure from the Organization or death or in the event of divorce.
- 1.2 Henceforth any national of another CERN Member State belonging to the European Economic Area (Austria, Belgium, Denmark, Finland, Germany, Greece, Italy, Norway, the Netherlands, Portugal, Spain, Sweden and the United Kingdom) can reside in France and work in Switzerland provided that all the following conditions are fulfilled: the person concerned must give proof that comprehensive health and maternity insurance cover has been taken out for him/herself, his/her spouse and for any dependants in the direct family line to cover the duration of their stay in France; the person concerned

Pour les membres du personnel du CERN, ressortissants des pays non membres de l'Espace Economique Européen, les dispositions visées au § 1.1 restent valables.

2. Retraités

2.1 Jusqu'à présent, un membre du personnel du CERN pouvait prendre sa retraite en France si les conditions suivantes étaient remplies: recevoir une pension, avoir travaillé en France pendant les douze derniers mois précédant la retraite, avoir séjourné en France, sans interruption, pendant les trois dernières années et, pour les ressortissants de pays extérieurs à la CEE, conserver l'assurance médicale du CERN.

2.2 Désormais, tout ressortissant d'un pays de l'Espace Economique Européen peut résider en France dès son départ à la retraite, même s'il résidait auparavant en Suisse.

Pour les membres du personnel du CERN ressortissants d'autres pays, les quatre conditions visées au § 2.1 restent valables.

Relations avec les Pays-hôtes
Tél. 5152

must have adequate financial means (the amount is specified in the legal French text).

For CERN members of the personnel who are nationals of a country which is not a member of the European Economic Area, the provisions set out in § 1.1 remain valid.

2. Pensioners

2.1 Up to now a member of the CERN personnel was entitled to reside in France on retirement provided that the following conditions were fulfilled: the person concerned had to be in receipt of a pension, to have worked in France during the 12 months prior to retirement, to have been resident in France for the past three years and, in the case of nationals on non-EEC countries, to have remained a member of the CERN Health Insurance scheme.

2.2 Henceforth any national of a country which is not a member of the European Economic Area can reside in France immediately on retirement even if he/she was formerly resident in Switzerland.

For members of the CERN personnel who are nationals of other countries, the four conditions set out in § 2.1 remain valid.

Relations with the Host States
Tel. 5152

DISPARITION/VOLS DE BIENS

A la suite d'une enquête conjointe de la gendarmerie française et de la police genevoise, un employé d'une entreprise contractante a avoué être l'auteur d'un vol au CERN. Il ne pourra plus travailler sur le domaine de l'Organisation.

Il est rappelé à cette occasion aux membres du personnel (titulaires et non titulaires) qu'ils sont tenus de prendre toutes les mesures nécessaires (fermeture des portes et fenêtres des bureaux et ateliers, etc.) pour protéger les biens mis à leur disposition. En cas de négligence manifeste, des sanctions sévères seront prises à l'encontre de la personne concernée. Lorsque du matériel appartenant au CERN ou à un particulier a disparu/a été volé/a été retrouvé, le responsable du matériel doit faire dans les délais les plus brefs une déclaration auprès des Sapeurs-pompiers, bâtiment 65. En cas d'effraction, il est demandé de ne rien toucher et d'avertir immédiatement les Sapeurs-pompiers, tél. 4444.

Groupe de Protection des Biens
Tél. 5152

DISAPPEARANCE/THEFT OF PROPERTY

Following a joint enquiry undertaken by the French and Swiss police, an employee of a contractor has admitted responsibility for a theft at CERN. He will no longer be permitted to work on the CERN site.

We should like to take this opportunity to remind members of the personnel (staff members and non-staff members alike) that they must take all necessary precautions (locking doors and closing windows of offices and workshops, etc.) to protect property in their care. In the event of obvious negligence, severe disciplinary action will be taken against the individual concerned. When property belonging to CERN or to an individual has disappeared/been stolen/been found, the person who is responsible for the item must file a report as soon as possible with the Fire and Rescue Service, Building 65. In the event of burglary, members of the personnel are requested not to touch anything and to inform the Fire and Rescue Service immediately (tel. 4444).

Property Protection Group
Tel. 5152

ADVISORY COMMITTEE OF CERN USERS Summary of the 23rd meeting held on 9 March 1994

Chairman's remarks

K. Peach, the new Chairman of ACCU thanked D. Toet, his predecessor, on leaving ACCU in a healthy state. He welcomed C. Llewellyn Smith, Director-General and K. Huitu, P. Lichard, D. Stickland and D. Vilanova new members for Finland, the Slovak Republic, the non-Member States and France (Saclay) respectively. S. Komamiya is the second member for non-Member States but was unable to be present.

News from the CERN Management

Thanking the Chairman for the opportunity of addressing ACCU, C. Llewellyn Smith indicated the value he attaches to ACCU in its work and recognises the need for contact with users.

The LHC Report to Council in December had been well received. Council confirmed that the LHC is the right machine for the future. He hopes for a positive decision during the first half of 1994.

A 10 year plan had been outlined, with LEP running until 1999 followed by a two year shutdown in order to install the LHC. This plan will cost more than can be undertaken with a constant budget, and so either more funds must be found or costs reduced. Some Member States and non-Member States are prepared to make special contributions towards the LHC. Interest in the LHC has been expressed by Canada, Japan and the United States.

The magnet design was recently reviewed, and given a clean bill of health. The costs are well within the estimates, and 8.65 T can be achieved with a safety margin.

Matters arising from previous minutes

A monitoring group chaired by Ph. Bernard has been set up to ensure that the new purchasing policy is pursued in the right spirit. This group could also act as an arbitrator.

In 1990 it was stated that the minimum financial support needed to stay in the Geneva area was 2800 SF per month. The question was asked if CERN should now adopt this figure. In signing the registration form declaring that the information given is correct as far as is known, Team Leaders acknowledge the social responsibility for the person on behalf of the home institute. It was emphasized that CERN has to be very strict concerning insurance cover.

Failures on the magnetic card readers are now reported to be only about one per month per reader, and no known access problems were currently known. Users experiencing problems should go first to the Users' Office where the card will be tested.

Some 5000 letters are received at CERN daily, of which maybe 10% are private. It is not the policy to distinguish between private and official mail, but people having private addresses in the Geneva area must use them for their private correspondence.

Visitors spending a small percentage of their time at CERN should note that they can request forwarding of private mail. In addition, the mail office should consider implementing a *poste restante* system.

The status of ACCU

The meeting discussed the note circulated earlier by the Chairman entitled "The Status of ACCU". ACCU agreed that, in future, the two *ex-officio* positions for the Research Directors should be occupied by one Research Director and the Director of Administration, and that a standing invitation be given to M. Jacob (advisor to the Director-General with respect to contact with the Member States) to attend as an observer.

Delegates were invited to send information to the Secretary for inclusion in a FactPack for ACCU.

Early identification of possible problems might be possible if 'News from the Member States' became a regular item agenda in which reports of happenings affecting ACCU, CERN and H.E.Physics could be outlined. Any minor problems encountered should, in the first instance, be referred to the Users' Office.

Relationship to the Staff Association

A memorandum from P. Darriulat had been circulated prior to the meeting. M. Borghini, President of the Staff Association agreed with the content, and showed a diagram indicating the relationship between various organs of CERN, the Staff and the Users. Whereas 80% of the CERN Staff are paid-up members of the Staff Association, only 0.1% of the outside users are. The Staff Association will write to all users pointing out the advantages of joining. ACCU welcomed this initiative.

Electronic pool advisory Committee (EPAC)

D. Toet, the ACCU representative on EPAC presented a report on the discussions taking place in EPAC in preparation for a new Rental Scheme for electronics borrowed from the Electronics Pool. This new scheme will be more equitable to users and further improve the Pool management without any reduction in the contribution from CERN to the Pool.

EPAC was congratulated on its good work, and a progress report is expected for the next ACCU meeting.

Reports from ACCU representatives on CERN Committees

a) The Restaurants Committee

B. Michel is the ACCU representative with B. Nellen as his replacement.

ACCU has complained about the lack of service in Restaurant No.1 in the evenings and weekends. The current situation will continue until 11 April when evening and weekend openings will be resumed. The full opening will now be at the end of May. The CCR has insisted on a better representation of users in the Restaurants Committee in proportion to their use of restaurants.

b) Housing Fund Committee

The ACCU representative, C. Bricman, reviewed the situation. There is now more demand for accommodation in France than in Switzerland, and the number of apartments available to CERN in Switzerland will be reduced. The rent for apartments remains unchanged for 1994 whereas there is a 4% increase in the cost of hostel accommodation. The construction of the new hostel proceeds as scheduled, but the need for low cost accommodation must not be forgotten.

c) Scientific Information Policy Board

V. Palladino and M. Battaglia represent ACCU on the SIPB. V. Palladino described the advances and improvements made since the Scientific Information Strategy was presented in 1987. At present the main effort is the introduction of a full-text preprint server where scanned images are stored on optical discs (~150,000 pages per annum). The focus of the ALICE retrieval system is now moving from implementation to end user access.

It is not clear whether the new security arrangements have reduced thefts from the library as the library cannot make a regular inventory.

d) Joint Training Board

The ACCU representative, J. Schacher, had to leave the meeting early, and the Secretary read a note from him.

CERN Annual Report

E.M. Rimmer, who is writing the "colour supplement" for the 1993 Annual Report, considers it timely to take a look at the CERN community and the needs of users. Contributions have been received from ACCU and the Users' Office.

Users' Office news

B. Pattison gave a progress report on the contacts between the Users' Office and Team Leaders whose response has been very positive. The aim of this contact is to improve our knowledge of teams and their members.

Any other business

A user has asked whether CERN should have a general no smoking policy except in well defined smoking areas? It was not clear that this would be an issue for ACCU. The CERN Medical Service should be asked to present its views. It was noted that the subject was under discussion with respect to Restaurant No. 1 following its improvements. Further input was requested.

H.-A. Gustafsson informed the meeting of the request by CN for a surcharge on the procurement of PC computers by users. P. Darriulat asked that the case cited be clearly documented, with written details to the Secretary.

ACCU requested the Medical Service to place a sign outside building 57 indicating that outside normal working hours the Fire Brigade provides emergency first aid in building 65.

Agenda for the next meeting

The next meeting will be on 15 June 1994 starting at 10.00 hrs, and will continue in the afternoon. Topics for discussion and/or report would include: EPAC, Restaurants Committee, Housing Fund, Relationship with Member States, smoking policy, Migration, and "Antenna" at CERN.

SEMINARS SEMINAIRES

Monday 9 May

TECHNICAL SEMINAR

at 14.00 hrs – CN Auditorium

LabVIEW Data Acquisition Seminar

by National Instruments CH

Invited: all developers who are planning computer based (analog) data acquisition. Topics: Data Acquisition Fundamentals, Transducers, Signal Conditioning, Data Acquisition Board Performances, DAQ software, Virtual Instruments. There will be time for further, more individual discussions.

Languages: English & French

Information: F. Soso / CN-CE / 2344

Monday 9 May

PPE SEMINAR

at 16.30 hrs – Auditorium

Observation of $B^- \rightarrow D^{*0} \ell^- \bar{\nu}$ with the ALEPH detector

by Leo BELLANTONI / Univ. of Wisconsin-Madison

The inclusive semileptonic branching ratio of b hadrons has been measured by several experiments to be $11.1 \pm 0.3\%$. Experimental attempts at explaining the inclusive semileptonic rate as a sum of exclusive final states has not been entirely successful. For example, the simplest final states in semi-leptonic B^- decays: $B^- \rightarrow D^0 \ell^- \bar{\nu}$, $B^- \rightarrow D^0 \ell^- \bar{\nu}$ account for only 60% of the inclusive rate. The nature of the remaining decays continues to be an object of investigation. In this talk, unambiguous evidence for the decay $B^- \rightarrow D^{*0} \ell^- \bar{\nu}$ will be presented. The implications of the observed decay rate in explaining the "deficit" will be discussed.

Tuesday 10 May

USER MEETING

at 14.00 hrs – CN Auditorium

LabVIEW User Group Meeting, CERN and Suisse Romande

by National Instruments CH/USA

All LabVIEW users and interested people are invited to attend this meeting.

The LabVIEW software is widely used in the AT, ECP, PPE, PS, and SL division at CERN. It provides a graphic programming language and a user-friendly interface for data acquisition, data processing and instrument control applications, without sacrificing speed. Developments are fully portable between MAC, Windows and Unix platforms. National Instruments CH and USA will be presenting the latest products on 9 May at 09.00 hrs in the CN Auditorium,

building 31. The presentation will be followed by demonstrations of user-developed applications and by a discussion session.

Languages: English, French, German

Information: F. Soso, CN/CE, 2344

Wednesday 11 May

AT SEMINAR

at 14.30 hrs – LEP Auditorium

bldg 30, 7th floor

Design, development and fabrication of the first 10 m long superconducting dipole prototype for the LHC

by M. BONA / CERN-AT

Testing of the first superconducting dipole prototype for the LHC has recently started at CERN. The magnet, on which magnetic measurements are still being performed, has reached in its first go the nominal field of the machine. During the seminar an overview of the basic design principles of this magnet will be given, together with a brief description of the fabrication technology. The main difficulties that had to be overcome during the R&D phase carried out in collaboration with Industry will then be discussed, as well as the technological solutions that had to be implemented to follow the relevant design evolution.

Wednesday 11 May

COMPUTING SEMINAR

at 16.00 hrs – Auditorium*

Introduction to the World-Wide Web

by Robert CAILLIAU / CERN-ECP

The World-Wide Web (W3) is a networked information system that is now in widespread use throughout the academic institutes of the world. W3 originated at CERN. The talk is aimed at those people who have never seen or used it, but casual and novice users or those who would like to start publishing are also welcome. After a short demonstration, there will be an explanation of the basic properties of the Web, a presentation of the CERN support team and indications on how to become a user if you are not already.

* Note unusual venue

Monday 16 May

ISOLDE EXPERIMENTS COMMITTEE

Open session

at 14.00 hrs – Council Chamber

1. Introductory remarks by the Chairman.
2. Progress report on Laser Ion Source development by the Isolde Technical Group Leader.
3. Isolde Coordinator's report.
4. Addendum to proposal: Electrical activation of dopant atoms in the II-VI Materials M-X (M=Zn, Cd and X=S, Se