

COMMUNICATIONS OFFICIELLES

OFFICIAL NEWS

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RAPPEL!

EPAVES ET VEHICULES ABANDONNES SUR LES PARKINGS

Suite à de nombreux contrôles effectués sur les parkings du CERN, nous avons constaté que plusieurs véhicules étaient abandonnés avec ou sans plaques d'immatriculation, ou sans vignette CERN permettant d'identifier les propriétaires.

Nous prions donc tous les propriétaires de véhicule non identifiable de prendre contact, dans les plus brefs délais, avec M. R. Rochat / 7552, ou bip 13-1300.

Sans réponse de la part du propriétaire de ces véhicules, le processus d'évacuation du site des véhicules abandonnés sera entrepris, selon la procédure officielle (document disponible dans les secrétariats de Division).

Directeur Appui Technique

REMINDER!

WRECKS AND ABANDONED VEHICLES IN CERN CAR PARKS

A number of checks in the CERN car parks have shown there are several vehicles in them that have been abandoned, with or without registration plates and CERN stickers identifying their owners.

We therefore request all owners of unidentifiable vehicles as soon as possible to contact Mr R. Rochat (tel. 7552 or Beep No. 13-1300).

Should owners of such abandoned vehicles fail to reply, the process of removing abandoned vehicles from the site will be initiated in accordance with official procedures (document available in Division Secretariats).

Technical Support Director

SEMINARS SEMINAIRES

Monday 17 August

PRESENTATION

at 10.30 hrs – CN Auditorium
bldg 31/3-005

The FORGE-90 parallel programming environment

by John LEVESQUE / President, Applied Parallel
Research, Inc.

This presentation will deal with the parallel programming environment FORGE-90 which allows a user to analyze dusty deck FORTRAN 77 programs and participate in the parallelization of the program. After a successful session, FORGE-90 can then generate parallel code for shared memory, distributed memory- MIMD or distributed memory-SIMD machines. The generated code is either FORTRAN 77 with directives, FORTRAN 77 with message passing calls or

FORTTRAN 90. FORGE-90 is an excellent code browser for either FORTRAN 77 or FORTRAN 90 programs. The talk will also discuss the HPF (High Performance Fortran) proposed language, and how FORGE-90 could be used to either generate HPF, accept HPF, or perform consistency checking on the HPF program.

John Levesque heads a group of specialists whose expertise in the development of software for the Effective Utilization of Advanced Scientific Computers is world-renowned. For the past 20 years, the group has worked on computers ranging from the ILLIACIV and Cray 1 to the latest vector and parallel computers.

Information: Syed Pasha / IBM / 7083 or
(022) 791 52 49 / spas@chvm1.vnet.ibm.com

Wednesday 19 August

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

The unitarity limit and multi-Higgs production at high energies

by Ronald KLEISS / CERN

We discuss the cross section for the production of many scalar bosons at high energies at tree level in the weak-coupling regime. We improve on previous speculations and prove that unitarity is violated for sufficiently high energies and multiplicities. We present speculations on the conditions that the full, effective theory has to obey in order to satisfy unitarity.

Thursday 20 August

CERN COLLOQUIUM

at 16.30 hrs – Auditorium*

Search for a T-violating atomic electric dipole moment

by Norval FORTSON / University of Washington, Seattle

We are carrying out a new search for a permanent electric dipole moment (EDM) of the ^{199}Hg atom, which can exist only if time-reversal symmetry is violated. We use circularly polarized 254 nm light to line up the Hg nuclear spins and to monitor their precession rate in an applied electric field of 10 kV/cm. We have achieved a sensitivity to frequency shifts at the nanohertz level, which corresponds to an EDM below 10^{-27} e-cm. This sensitivity improves on our earlier Hg experiment by a factor of 50, and allows us to detect the smallest changes in energy ever seen in any experiment. Our experimental technique and the most recent results will be discussed, together with implications as to the size of CP violating interactions among hadrons and leptons within the Hg atom.

* Tea & coffee will be served at 16.00 hrs

Friday 21 August

MEETING ON PARTICLE PHYSICS PHENOMENOLOGY

at 14.00 hrs – TH Conference Room

Strong CP problem, dipole moment of the neutron and the up quark mass

by O. PENE / CERN

It is usually stated that the θ term in QCD generates a dipole moment of the neutron proportional to θm_u (m_u being the up quark mass) and that the experimental bounds on the neutron dipole moment implies $\theta_{\text{QCD}} < 10^{-9}$, which is an unnaturally small value. This statement relies :

- 1. on several estimates of the dipole moment of the neutron : I shall argue that such estimates are not easy to perform correctly. In fact only the chiral estimates may be relied upon.*
- 2. on the usual chiral estimates of the up quark mass. However Kaplan and Manohar have shown that low*

energy chiral phenomenology cannot by itself exclude a vanishing up quark mass. I will briefly review this question and discuss if m_u can be zero.

Monday 24 August

AC SEMINAR

at 11.00 hrs – AT Auditorium,
bldg 30, 7th floor

Highlights from the International Conference on High Energy Accelerators

by E.J.N. WILSON / CERN

Hamburg was recently the setting for the latest in the series of International Accelerator Conferences. There was news from all the world's laboratories including operational experience with old machines, progress on the construction of new ones, as well as plans for projects for the – sometimes near – sometimes far – but always unpredictable – future. The conference emphasised the commissioning of DESY's latest collider, HERA, and there was a notable mushrooming of interest in linear colliders and both superconducting cavities and magnets. There were presentations of measurements for CEBAF, LEP, LHC, RHIC, SSC, and UNK plus details from many other projects.

Monday 24 August

ISOLDE EXPERIMENTS COMMITTEE

at 14.00 hrs – Council Chamber

Open session :

- 1. Introductory Remarks by the Chairman.*
- 2. Status Report on General Purpose Separator and Beamlines (E. Kugler).*
- 3. Report on Medium-Term ISOLDE Prospects (H. Ravn).*
- 4. Status Report on High Voltage System (A. Fowler).*
- 5. Status Report on ISOLDE Experimental Programme (K. Elsener).*

Closed session

Monday 24 August

after the Open Session, 6th Floor, Main Building,
(continuing on Tuesday 25 August from 10.00 hrs,
if necessary)

Tuesday 25 August

PRESENTATION

at 10.00 hrs – CN Auditorium
bldg 31/3-005

Digital's MPP Strategy

by Marco ANNARATONE / Technical Director,
DEC

Information : Tor Bothner / 7095 / beep 5555 /
bothner@cernvax

Wednesday 26 August

COMPUTING SEMINAR

at 15.00 hrs* – CN Auditorium
bldg 31/3-005

**PVM/HeNCE and ISIS: two packages for writing
parallel distributed applications**

by Fabien COLLIN / ISIAL, University of Nancy,
France

* Please note unusual time!

Jeudi 27 août

PRESENTATION TECHNIQUE

de 09.00 à 16.00 h – bus, parking PTT, près bât. 63

*Phoenix Contact AG (D/CH) présente, dans leur bus de
démonstration, les dernières nouveautés et les articles
marquants de leur programme de vente.*

Langues: allemand, anglais, français, italien

Renseignements: M.Diraison / FI / 4585

EDUCATION SERVICES EDUCATIFS

SUMMER STUDENTS LECTURE PROGRAMME

This week

Mon. 17 August*	09.00	Physics highlights from LEAR	R. Landua
	10.15	Phenomenology of the universe (1)	A. de Rújula
	11.15	-----	---
Tue. 18 August*	09.00	Trigger in High Energy Physics Experiment	Ph. Bloch
	10.15	Phenomenology of the universe (2)	A. de Rújula
	11.15	-----	---
Wed. 19 August*	09.00	Course Review	---
	10.15	Course Review	---
	11.15	Course Review	---

* Place of lecture : Council Chamber

While these lectures are prepared for Summer Students who are at CERN this summer, they are open to anyone at CERN. Many of these lectures treat topics at general level, such 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.

Fellows & Associates Service / 4471