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VACANCE DE POSTE INTERNE POUR UN ORGANISATEUR DE VISITES DE PERSONNALITÉS AU CERN

Un nouveau poste a été ouvert pour un membre du personnel titulaire scientifique, technique ou administratif qui sera chargé d'organiser des visites de personnalités au CERN.

Les candidats internes (titulaires) intéressés par ce poste devront posséder une excellente connaissance du CERN, de ses activités et de ses services. Ils devront avoir des dispositions pour les tâches de relations publiques et parler couramment plusieurs langues.

Pour complément d'information, s'adresser à G. Hentsch / DG (tél. 5451) ou à W. Zapf / PE (tél. 4466).

SEMINARS SEMINAIRES

Monday 8 July

AC SEMINAR

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

An overview of R&D for LHC cryogenics
by Ph. LEBRUN / CERN-AT

The cryogenic system for the LHC project constitutes a major engineering challenge, both quantitatively, in view of its unprecedented size, and qualitatively: LHC will be the first distributed system using superfluid helium as a coolant. Consequently, a substantial effort in R&D is under way to validate the basic design choices, explore potentially interesting alternatives, and globally optimize the project within the technical, economical and siting constraints imposed by its integration into CERN infrastructures and existing facilities.

Monday 8 July

PS/HI LECTURE SERIES

at 11.00 hrs – PS Conference Room
bldg 6, 2-024

Plasma physics concepts : laser beams and self-focusing
by Heinrich HORA / CERN-PS

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.

INTERNAL VACANCY FOR AN ORGANIZER OF VIP VISITS TO CERN

A new position has been opened for a scientific, technical or administrative staff member to be entrusted with the organization of VIP visits to CERN.

Internal candidates (staff members) interested in this position should possess an excellent knowledge of CERN, its various activities and services. They should have a talent for public relations work and be fluent in several languages.

Please contact G. Hentsch / DG (tel. 5451) or W. Zapf / PE (tel. 4466) for further information.

Monday 8 July

SPECIAL SEMINAR

on the occasion of the ESA exhibition at Microcosm

at 14.30 hrs – Auditorium

Space science in Europe

by Roger BONNET / Director of Science
Programme, ESA

From Giotto, a few years ago, to Ulysses, which was launched recently, ESA is at the origin of an important scientific space programme. The highlights of past missions and the plans for the new ones will be presented.

This Seminar is part of the inauguration ceremony of the ESA Science Expo at Microcosm.

Monday 8 July

PPE SEMINAR

at 16.30 hrs – Council Chamber*

A measurement of the electroweak quark couplings and QCD tests with final state photons from hadronic Z^0 decays

by Wolfram ZEUNER / OPAL Collaboration

Since photons couple to the square of the electrical charge of the emitting quarks, they are an effective and theoretically

well described tag for *u*-type quarks. This allows together with the overall hadronic event sample a measurement of the electroweak couplings of *u*-type and *d*-type quarks. The experimental method, the results and the theoretical prediction will be described. In addition first results from a QCD analysis with these events will be presented.

* Please note unusual place

Tuesday 9 July

CERN PARTICLE PHYSICS SEMINAR

at 16.30 hrs – Auditorium*

W and Z physics with the UA2 detector

by Darien WOOD / LAL, Orsay

UA2 completed its last run at the CERN $\bar{p}p$ collider in December 1990. Studies of W and Z physics have now been carried out on the entire data sample collected between 1988 and 1990, which corresponds to an integrated luminosity of 13 inverse picobarns. The final measurements of the W mass and width, and of the W and Z production cross-sections will be presented along with preliminary results from a study of e^+e^- events.

* Tea & coffee will be served at 16.00 hrs.

Wednesday 10 July

THEORETICAL SEMINAR

at 14.00 hrs – TH Conference Room

Symmetries of cosmological superstring vacua

by Gabriele VENEZIANO / CERN

The modified Einstein-Friedmann equations that follow from superstring theory are shown to possess non-compact symmetries which transform different string cosmologies into one another. Generically, these describe an evolution from a weak coupling, flat $D = 10$ state towards a strong coupling, curved, compactified Universe through a (possibly appealing) pre-big-bang cosmological scenario.

Thursday 11 July*

PS SEMINAR

at 14.30 hrs* – PS Auditorium

bldg 6/2–024

SNO-ELF : an FEL based drive beam injector for CLIC

by W.A. BARLETTA / LLNL and UCLA & R. BONIFACIO / Univ. di Milano

To generate the CLIC drive beam, we propose an amalgam of magnetic switching, radio-frequency and FEL technologies. The beam train begins with a small thermionic cathode generating a 300 A, 1.5 ns beam in a 1.25 MeV induction stack driven with SNOMAD compressors. Low extraction is controlled with a grid driven by ferromagnetic shock lines. Low frequency bunching cavities compress the beam to 3 kA prior to its acceleration to 15 MeV in cryogenic, high field 350

MHz cavities. The 15 MeV beam is injected with a 30 GHz signal into a waveguide inside a short, high field wiggler. The high currents lead to high gain and rapid bunching. Termination of the FEL well before saturation maximizes bunching (at 25 X) and minimizes energy spread to yield the desired peak currents and waveform. Subsequent rapid acceleration prevents space charge debunching.

* Please note unusual day & time

Thursday 11 July

PS/HI LECTURE SERIES

at 16.00 hrs – PS Conference room

bldg 6, 2–024

Plasma physics concepts : laser ion sources for accelerators

by Heinrich HORA / CERN-PS

Thursday 11 July

CERN COLLOQUIUM

at 16.30 hrs – Auditorium*

Wolf lecture : A bag of tricks

by V.L. TELEGDI / California Institute of Technology, Pasadena, California

To the speaker, the beauty of experimental physics consisted in getting correct results by economical means; this is admittedly becoming – at least in particle physics – harder by the day. Reminiscing about a lifetime in physics, he will describe a few experiments of the ‘good old days’ which hopefully fulfill this criterion.

* Tea & coffee will be served at 16.00 hrs.

Monday 15 July

AC SEMINAR

at 11.00 hrs – AT Auditorium

bldg 30, 7th floor

Report on ‘12th International Conference on Magnet Technology (MT12)’, Leningrad, 24-28 June 1991

by D. PERINI and F. RODRIGUEZ-MATEOS / CERN-AT

The International Conference on Magnet Technology is organized on a two-year basis and is devoted to recent developments and future trends in the field of magnet technology for Physics Research, Industrial and Medical Applications, including progress of materials, mechanical and electromagnetic calculations, superconducting behaviour, instrumentation, cryogenics related to the former applications. The speakers will give an overview on the topics presented and on the technical exhibition which took place in parallel with the conference. They will focus mainly on the cryomagnets (design, construction, tests, components) for accelerators, especially those for SSC, HERA, UNK and LHC.

Monday 15 July

PS/HI LECTURE SERIES

at 16.00 hrs – PS Conference room
bldg 6, 2-024

**Plasma physics concepts : plasma model for
surface tension of metals and nuclei**

by Heinrich HORA / CERN-PS

Monday 15 July

PPE SEMINAR

at 16.30 hrs – Auditorium

Quark Tagging with the OPAL detector at LEP

by Ties BEHNKE / CERN-PPE & OPAL
Collaboration

The full reconstruction of mesons in jets from hadronic decays of the Z^0 offer the opportunity to study the fragmentation process for different flavors. Investigations of the fragmentation function of three different Mesons, K^0 , D^ and J/ψ , have been performed with the OPAL detector. The reconstruction procedures for the three decays are discussed and measurements of the branching ratios and the fragmentation functions are presented. Because all three analyses rely heavily on the tracking system, an overview over the performance of this part of the detector is given. Recent analytical calculations predict the momentum spectra of mesons from Z^0 decays. These calculations are compared to the observed K^0 momentum distribution. Good agreement between theory and experiment is found.*

Tuesday 16 July

CERN PARTICLE PHYSICS SEMINAR

at 16.30hrs – Auditorium*

Recent results from L3

by Gregor HERTEN / M.I.T.

Wednesday 17 July

COMPUTING SEMINAR

at 16.00 hrs – CN Auditorium
bldg 31/3-005

**Mona Lisa : A paradigm for coarse grain
parallelism**

by André SCHNEIDER / CERN & University of
Geneva and Adrian KING / CERN

Organizer : N. Cremel, CN

Thursday 18 July

CN SPECIAL SEMINAR

at 11.00 hrs – CN Auditorium

Rethinking the ISIS System

by Kenneth P. BIRMAN / Cornell University

FOR INFORMATION / POUR INFORMATION

LAPP

Laboratoire d'Annecy de Physique des Particules

Chemin de Bellevue
BP 110
F – 74941 Annecy-le-Vieux
Tél. 50 23 32 45

Thursday 11 July

LAPP SEMINAR

at 10.45 hrs – LAPP Auditorium

Custom VLSI development at KEK

by Susumu INABA

Information : Sylvie LEES-ROSIER, LAPP / ext. 328 / SROSIER@FRCPN11