

Thursday 2 May

SL SEMINAR

at 16.00 hrs – SL Auditorium, Prevessin, bldg. 864

The Control System for the SPS Power Converters

by Arend DINIUS / CERN

For controlling all the SPS power converters, 27 VME crates are installed. This modular system,

* *Tea and coffee will be served at 15:30 hrs in front of the auditorium*

Friday 3 May

LHC TECHNICAL SEMINAR

at 16.00 hrs – AT Auditorium, Bldg. 30 (7th fl.)

Accelerator Physics Aspects of LHC Design

by Jacques GAREYTE / SL

Please note the unusual day.

POUR INFORMATION / FOR INFORMATION

UNIVERSITY OF GENEVA

PARTICLE PHYSICS DEPARTMENT

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1211 GENEVA 4

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Wednesday 24 April

SEMINAR ON PARTICLE PHYSICS

at 17.00 hrs - Auditoire Stuckelberg

The LHC-B: A Dedicated Experiment to Study CP Violation in B-Meson Decays at LHC

by Dr Tatsuya NAKADA/PSI-Villigen

The origin of CP violation is one of the few remaining unanswered questions in elementary particle physics. It is now widely recognised that the B-meson system is the best place to examine whether CP violation can be accommodated within the framework of the standard model. A precision study of CP violation in B-meson decays may lead to a discovery of new physics. The LHC-B is a dedicated experiment to exploit the potential of LHC as the ultimate "B-meson factory". In this talk, the experimental set up and expected performances will be discussed.

LAPP

Laboratoire d'Annecy de physique des particules

Chemin Bellevue

F-74000 ANNECY-LE-VIEUX

Vendredi 26s avril

at 14.04 hrs – Auditorium du LAPP

"CALORIMETRIE ELECTROMAGNETIQUE DANS CMS"

par H. HILLEMANN

EDUCATION SERVICES EDUCATIFS

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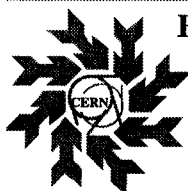
Tél. 5811

Jeudi 25 avril

à 13.00 h – Amphithéâtre

Science pour tous

par Rafel CARRERAS



ENSEIGNEMENT TECHNIQUE TECHNICAL TRAINING

Monique Duval ☎ 44.60

monique_duval@macmail

Information sur les cours, dates et places disponibles sur WWW :

Information about the courses, dates and places available on WWW :

<http://www.cern.ch/Training/>

Thursday 25 April

TECHNICAL SEMINAR

at 14.30 hrs – Room 13, Building 593

Magnetostrictive Force Actuators for High Precision Positioning

V.I. Rakhovsky (VMP LTD, Moskow, Russia)

Magnetostrictive actuators for positioning with subnanometer resolution (10^{-2} nm) in ranges up to 1m have been developed and used. These actuators with 10 nm step can also be used as force actuators to deliver efforts up to 10^4 N. Precise displacements are set by active elements made of giant magnetostrictive alloys.

The actuators have been designed for precise manipulators and object tables, nanotechnology devices, adaptive optics, for the manufacturing of VLSI, Fresnel optics, diffraction gratings, etc. Low-power excitation of active elements is performed due to a unique patented method allowing for a drift of less than 10^{-3} nm/s without any temperature stabilization. The actuator consumes energy only during displacements.

It can be either operated manually without any external energy source, or by computer control. With manual control one can achieve steps of 3 nm, and with a reduction gear $15 \cdot 10^{-3}$ nm. Under computer control these values are 10^{-2} nm resp. $4 \cdot 10^{-5}$ nm. The dimensions of these actuators are 50 x 31 x 27 mm and 120 x 190 x 38 mm.

The author will give a demonstration of the micropositioner under various conditions.

This seminar is free of charge and no registration is necessary.