

UNIVERSITE DE GENEVE

Département de physique nucléaire et corpusculaire
24, Quai Ernest-Ansermet
1211 GENEVE 4
Tél.: (022) 702 6273
Fax: (022) 781 2192

Mercredi 8 décembre

SÉMINAIRE DE PHYSIQUE NUCLÉAIRE

à 17.00 hrs - Auditoire Stückelberg

Search for anti-matter and geomagnetic effects on trapped Particles with the AMS-01 detector

par Giovanni AMBROSI

The AMS experiment is a magnetic spectrometer designed and constructed to measure charged particles in space. The detector uses a permanent magnet together with a precision silicon tracking detector, time-of-flight counters and areogel counters. The first 10-day mission of AMS took place on June 2, 1998 on board the NASA space Shuttle Discovery. The construction of the AMS detector, results on the anti-matter search and geomagnetic effects on trapped particles will be presented.

**EDUCATION
SERVICES
EDUCATIFS**



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/>

**ENSEIGNEMENT ACADEMIQUE
ACADEMIC TRAINING**

F. Benz Secretariat ☎ 73127
francoise.benz@cern.ch

ACADEMIC TRAINING

LECTURE SERIES

FOR POSTGRADUATE STUDENTS

6, 7, 9 & 10 December

from 11.00 to 12.00 hrs – Auditorium, bldg 500

Basic Processes and Trends in Gaseous Detectors

by F. SAULI / CERN-EP

Almost a century after the invention of the proportional counter, a large research effort is still devoted to better understand the basic properties of gaseous detectors, and

to improve their performances and reliability, particularly in view of use at the high radiation levels expected at LHC. In the first part of the lectures, after a brief introduction on underlying physical phenomena, I will review modern sophisticated computational tools, as well as some classic “back of the envelope” analytical methods, available today for estimating the general performances of gaseous detectors. In the second part, I will analyze in more detail problems specific to the use of detectors at high rates (space charge, discharges, aging), and describe the recent development of powerful and perhaps more reliable devices, particularly in the field of position-sensitive micro-pattern detectors.