

## SEMINAIRE DE PHYSIQUE CORPUSCULAIRE

**SUJET:** The Search for the Magnetic Monopole

PAR: Dr Philippe Mermod

University of Geneva, DPNC

**DATE:** Mercredi 9 mai 2012, 11h15

LIEU: Science III, Auditoire 1S081

30, quai Ernest-Ansermet, 1211 Genève 4

## **RESUME:**

It has long been realised that the existence of a magnetic monopole would be sufficient to explain the quantisation of electric charge, and to symmetrise Maxwell's equations. Furthermore, the monopole is an essential ingredient in Grand Unification theories. Primordial monopoles would have been produced in the Early Universe and still be present today, either in cosmic rays or trapped in matter. Monopoles of accessible masses would also be pair-produced at high-energy accelerators. Their remarkable properties can be exploited to devise various means of direct detection. After reviewing the most recent monopole searches, whether at colliders, in flight or in matter, the prospects for new monopole searches at the LHC and elsewhere will be discussed.

INFORMATION: http://dpnc.unige.ch/seminaire/annonce.html

ORGANISATEUR: Mrs Gabriella Pasztor