



**UNIVERSITÉ  
DE GENÈVE**

**FACULTÉ DES SCIENCES**  
Département de physique  
nucléaire et corpusculaire

## **SÉMINAIRE DE PHYSIQUE CORPUSCULAIRE**

- SUJET:**     **AMS – First results**
- PAR:**       **Dr Mercedes Paniccia**  
                  Université de Genève
- DATE:**      Mercredi 29 mai, 11h15
- LIEU:**        Science III, Auditoire 1S081  
                  30, quai Ernest-Ansermet, 1211 Genève 4

### **RÉSUMÉ:**

The Alpha Magnetic Spectrometer is a state-of-the-art particle physics detector operating as an external module on the International Space Station. It uses the unique environment of space to study the universe and its origin by searching for antimatter, dark matter while performing precision measurements of cosmic rays composition and flux. Since its installation on May 19, 2011 it has collected over 30 billion cosmic rays of energies ranging from several hundred MeV up to few TeV.

In this talk we will present the precision measurement of the positron fraction in cosmic rays in the energy range from 0.5 to 350 GeV based on 6.8 million positron and electron events collected in the initial 18 month period of operation in space.

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

ORGANISATEURS: Prof. [Teresa.Montaruli@unige.ch](mailto:Teresa.Montaruli@unige.ch), Prof. [Giuseppe.Iacobucci@unige.ch](mailto:Giuseppe.Iacobucci@unige.ch)