

Recent Highlight from the AMS Cosmic Ray Observatory on the International Space Station.

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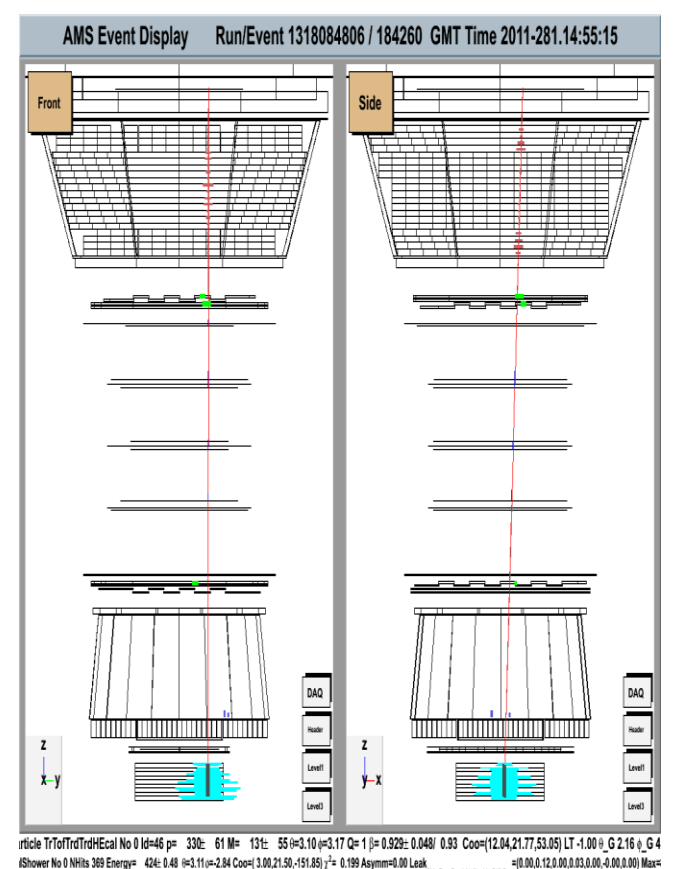
Tuesday, 23 April 2013, 17:00 h
Auditorium

The AMS-02 cosmic ray observatory is a state of the art particle detector for long-term observation of cosmic rays in the GeV to TeV region. It consists of a magnetic spectrometer, high performance particle identification systems and a calorimeter. It has been launched successfully on May 16, 2011 on board of space Shuttle Endeavor and installed on the International Space Station (ISS) shortly afterwards. It is since then taking data continuously.

The commissioning phase of the detector is finished, all subsystems are up and running and perform according to specifications. Detector operation is performed from the Payload Operations and Control Center at CERN.

Science data are timely transmitted to ground, stored and analyzed using the Science Operation Center, also installed at CERN.

I will present in-flight experience with the detector and its subsystems, as well as first results concerning the fractional flux of positrons in cosmic rays, which shows a so far unexplained rise with energy.



- **After the seminar there is a chance for private discussions with the speaker over wine and pretzels**