



## **Precision Measurement of Boron-to-Carbon and Carbon-to-Helium flux ratio in Cosmic Rays from 2 GV to 2 TV with the Alpha Magnetic Spectrometer on the International Space Station. (12' + 3')**

*Thursday 4 August 2016 09:30 (15 minutes)*

AMS-02 is wide acceptance high-energy physics experiment installed on the International Space Station in May 2011 and operating continuously since then. AMS-02 is able to precisely separate cosmic rays light nuclei ( $1 \leq Z \leq 8$ ) with contaminations less than  $10^{-3}$ . The light nuclei cosmic ray Boron to Carbon flux ratio is a very well known sensitive observable for the understanding of the propagation of cosmic rays in the Galaxy, being Boron a secondary product of spallation on the interstellar medium of heavier primary elements such as Carbon and Oxygen. The ratio of the two primary species such as Carbon and Helium is also important for understanding charge dependencies of the production, acceleration and propagation mechanisms of cosmic rays in our galaxy. The status of the measurement of the boron-to-carbon and carbon-to-helium based on 10 millions Boron and Carbon and 50 million Helium events is presented.

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