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Precision Measurement of Boron-to-Carbon ratio in Cosmic Rays from 2 GV to 2 TV with the Alpha Magnetic Spectrometer on the International Space Station.

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AMS-02 is a wide acceptance high-energy physics experiment installed on the International Space Station in May 2011 and it has been operating continuously since then. AMS-02 is able to separate cosmic rays light nuclei ($1 \leq Z \leq 8$) with contaminations less than 10^{-3} .

The ratio between the cosmic rays Boron and Carbon fluxes is known to be very sensitive to the properties 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. A precise measurement reaching the TeV region can significantly help understanding cosmic rays propagation in the Galaxy and the amount of matter traversed before reaching Earth.

The status of the measurement of the boron-to-carbon ratio based on 10 millions Boron and Carbon events is presented.

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