

# Measurements of Light Nuclear Isotopic Composition in Cosmic Rays with the Alpha Magnetic Spectrometer on the International Space Station

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The average lifetime of cosmic rays in the Galaxy related with their confinement within the Galactic propagation halo, is a very important parameter to understand cosmic-ray propagation processes and the cosmic-ray origin. The measurement of the  $^{10}\text{Be}/^{9}\text{Be}$  secondary isotopes ratio, as  $^{10}\text{Be}$  has half-life of 1.39 million years, can be used to constrain the propagation lifetime. The  $^6\text{Li}/^7\text{Li}$  ratio, as both isotopes are secondary and stable, is expected to reflect the ratio between the production cross sections and therefore constitute a good check of the reconstruction method. Measurement of the lithium and beryllium isotopes ratio ( $^6\text{Li}/^7\text{Li}$ ) and ( $^{10}\text{Be}/^9\text{Be}$ ) as a function of the kinetic energy per nucleon from 0.5 GeV/nucleon to 10 GeV/nucleon based on data collected by AMS during the first 7 years of operation are presented. Prospects for measurement of the boron isotopic ratios with AMS-02 will be presented.

## Secondary track (number)

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