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## Precision Measurement of the Helium Flux in Primary Cosmic Rays from 2 GV to 3 TV with the Alpha Magnetic Spectrometer on the International Space Station

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A precision measurement of the Helium flux in primary cosmic rays with rigidity 2 GV to 3 TV is presented based on 50 million events. The detailed variation with rigidity of the spectral index is presented for the first time. The helium spectral index is progressively hardening at high rigidities. The precise ratio of the proton to Helium flux is also presented. Surprisingly, above  $\sim 25$  GV the ratio can be accurately described with a single power law.

### Collaboration

AMS

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