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## Explaining the Hardening Structures of Helium Spectrum and Boron to Carbon Ratio through Different Propagation Models

Recently, a series of high-precision measurements by various experiments have revealed a hardening trend in the spectra of cosmic ray nuclei and the boron-to-carbon (B/C) ratio at around 200 GV. These anomalous structures have important implications for our understanding of the origin and propagation of Galactic cosmic rays (GCRs). We investigate several propagation models and verify that an extension of the traditional propagation model taking into account spatially dependent propagation and secondary particle acceleration provides a more accurate description of the latest B/C ratio and the Helium flux data measured by DAMPE, CALET, and AMS-02.

### Summary

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