

Revising Cosmic-Ray Propagation Scenarios based on Latest Cosmic-Ray Measurements

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Cosmic-ray measurements inform on Galactic cosmic-ray origin and propagation in the Galaxy. Based on AMS-02 and Voyager cosmic-ray measurements, we have revised various scenarios of cosmic-ray propagation models under standard assumptions: pure diffusion, diffusion with convection, diffusion with reacceleration, and diffusion with reacceleration and convection. Aiming at containing as much as possible the number of model parameters such as spectral indexes and breaks of the main species, we explore the performance of different scenarios. Commonly accepted long-standing truths are tested and some are put into question.

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