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Analysis of secondary cosmic ray lithium and beryllium with the DAMPE mission

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DAMPE (DArk Matter Particle Explorer) is a space-based particle detector launched in December 2015 to observe high-energy electrons, gamma rays, and cosmic rays. Secondary cosmic ray fluxes serve as key probes of the propagation and interaction of high-energy particles in the Galaxy. Spectral measurements of secondary nuclei, such as lithium, beryllium, as well as their ratios to primary fluxes, are fundamental for improving our understanding of cosmic ray acceleration and propagation. This work presents the latest results from DAMPE's data analysis, including the spectral measurements of lithium and beryllium and their ratios, spanning energies from a few dozen GeV/n to several TeV/n with 9 years of DAMPE flight data.

Collaboration(s)

DAMPE collaboration

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