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Measurement of the energy spectrum of the CNO group with the DAMPE mission

DAMPE is a space-based calorimeter specifically designed for the detection of cosmic electrons, gamma-rays, and nuclei. It has been launched in December 2015, and has been operating smoothly for over nine years, during which it has recorded more than 1.6 billion events. Among all medium-mass elements, the carbon-nitrogen-oxygen (CNO) group has the largest abundance. We have utilized 9 years of flight data to determine the total CNO spectrum up to the PeV scale. Latest results will be discussed, clearly showing a significant spectral hardening at a few TeV and a softening around 100 TeV.

Collaboration(s)

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