Seventeenth Marcel Grossmann Meeting



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Unique Properties of Primary Cosmic Rays measured by the Alpha Magnetic Spectrometer

Tuesday, 9 July 2024 15:10 (20 minutes)

We present high-statistics measurements of primary cosmic rays, including Proton, Helium, Carbon, Oxygen, Neon, Magnesium, Silicon, Sulfur, Iron, and Nickel, based on 11.5 years of AMS data. The data reveals, with high accuracy, that there are only three distinct classes of primary elements. Additionally, we provide a systematic comparison with the latest GALPROP cosmic ray model.

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Session Classification: AMS-02 experiment at the International Space Station

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