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Precision Measurement of Primary Cosmic Rays with Alpha MAgnetic spectrometer on ISS

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We present precision high statistics measurements of primary cosmic ray protons, helium, carbon and oxygen fluxes by Alpha Magnetic Spectrometer in the rigidity range from 2 GV to 3 TV. These measurements are based on 1 billion of protons, 125 million of Helium, 14 million of Carbon and 12 million of Oxygen nuclei collected by AMS during the first 7 years of operation aboard the International Space Station. The properties of these primary cosmic rays will be discussed.

We present precision high statistics fluxes of primary cosmic ray neon, magnesium and silicon measured by Alpha Magnetic Spectrometer in the rigidity range from 3 GV to 3 TV. These measurements are based on 5 million nuclei collected by AMS during the first 7 years of operation aboard the International Space Station. The unexpected new properties of these primary cosmic rays will be shown.

Authors: Dr CHOUTKO, Vitaly (Massachusetts Inst. of Technology (US)); YAN, Qi (Massachusetts Inst. of Technology (US)); OLIVA, Alberto (Centro de Investigaciones Energéti cas Medioambientales y Tecno); DEROME, Laurent Yves Marie (Centre National de la Recherche Scientifique (FR)); PHAN, Huy Duc (Massachusetts Inst. of Technology (US)); JIA, Yi (Massachusetts Inst. of Technology (US)); FORMATO, Valerio (Universita e INFN, Perugia (IT)); PANICCIA, Mercedes (Departement de Physique Nucleaire et Corpusculaire (DPNC))

Presenter: PHAN, Huy Duc (Massachusetts Inst. of Technology (US))

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