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Observation of the Identical Rigidity Dependence of the Primary Cosmic Rays Helium, Carbon and Oxygen fluxes by the Alpha Magnetic Spectrometer on the International Space Station

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The precision measurement of primary cosmic rays fluxes (in particular helium, carbon and oxygen) in the rigidity range from 2 GV to 3 TV is presented based on 90 million helium, 8 million carbon and 7 million oxygen nuclei collected by the Alpha Magnetic Spectrometer during its first 5 years of operation.
Unexpectedly, above 60 GV, these three spectra have identical rigidity dependence, moreover they all deviate from a single power law above 200 GV and harden in an identical way.

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