

Abstract Submitted
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Measuring cosmic-ray composition at PeV energies with the IceCube Observatory¹ JAMES BOURBEAU, STEFAN WESTERHOFF, Univ of Wisconsin, Madison, ICECUBE COLLABORATION — While cosmic-ray composition has been precisely measured at lower energies, it is still not well known at energies above the knee in the all-particle cosmic-ray spectrum. We present initial measurements of the cosmic-ray composition spectrum at PeV energies using one year of data from the IceCube Observatory. With its surface array and underground muon detector, the IceCube Observatory is capable of simultaneously measuring the total energy of cosmic-ray air showers as well as their muon content, allowing for composition discrimination.

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