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Measuring the Atmospheric Neutrino Flux at the Sudbury Neutrino Observatory JOSEPH FORMAGGIO, Massachusetts Institute of Technology, SNO COLLABORATION — The Sudbury Neutrino Observatory consists of a 1 kiloton heavy water Cerenkov detector designed to study the flux of neutrinos created in the solar core. In addition to solar neutrinos, the SNO experiment is also able to study the flux of atmospheric neutrinos by measuring the rate of neutrino induced muons traversing the heavy water volume. Due to the depth and flat overburden of the SNO detector (6010 meters water equivalent), it is possible in principle to determine both the unoscillated and oscillated components of the atmospheric neutrino flux as a function of energy. This talk will describe SNO's measurement of the atmospheric muon neutrino flux using data from the first phase of the experiment.

> Joseph Formaggio Massachusetts Institute of Technology

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