Abstract Submitted
for the DNP13 Meeting of
The American Physical Society

Development of a Cost-Effective Cosmic Ray Neutron Detector
MATTHEW HADDAD, Georgia State University — Recent studies indicate that there is a strong correlation between the cloud coverage in the atmosphere and the neutron flux measured at the surface of the Earth (Marsh & Svensmark, 2000). A project at Georgia State University (GSU) is to develop cost-effective portable cosmic ray detectors which will simultaneously measure cosmic muon and neutron flux in order to study the long-term correlation between climate change and the cosmic ray flux variation. This talk will present a prototype Geiger tube-like detector we are currently developing at GSU for measuring neutrons.

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Date submitted: 21 Aug 2013 Electronic form version 1.4