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Spectroscopy of Neutron Unbound Carbon Isotopes S. MOSBY, M. THOENNESSEN, NSCL / MSU, P. DEYOUNG, Hope College, MONA COL-LABORATION — Neutron unbound states in neutron-rich carbon isotopes were populated via knockout reactions from a ²²N beam at the National Superconducting Cyclotron Laboratory at Michigan State University. The Modular Neutron Array (MoNA) was used to measure the energy and position of emitted neutrons near zero degrees, while the remaining charged fragments were detected in a series of position and energy-sensitive detectors behind the MSU/FSU Sweeper magnet. The decay energy was then reconstructed event-by-event from the four-momentum vectors of the neutron and fragment. Results from the current analysis, including decay energy spectra for ^{19,20,21}C and interpretation, will be presented.

> Shea Mosby NSCL / MSU

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