

Abstract Submitted
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Observation of neutron-unbound resonant states in ^{23}O and ^{28}Ne JOHN NOVAK, Western Michigan University, NSCL/MSU, STEVE QUINN, MICHAEL STRONGMAN, SHEA MOSBY, ARTEMIS SPYROU, THOMAS BAUMANN, MICHAEL THOENNESSEN, NSCL/MSU, MONA COLLABORATION — The decay energy spectra of neutron-rich ^{23}O and ^{28}Ne were measured. The isotopes were produced in stripping reactions from a 85MeV/u ^{29}Na beam on a beryllium target. Neutrons were measured in coincidence with light neutron-rich fragments produced in stripping reactions from an 85MeV/u ^{29}Na beam on a beryllium target. The neutrons were detected with the Modular Neutron Array (MoNA) and the fragments were analyzed with the MSU/FSU Sweeper magnet system. Low-energy resonances close to the neutron-separation energies were observed in both system. The results for ^{23}O agrees with a previous measurement¹ and the resonance in ^{28}Ne was observed for the first time.

¹A. Schiller et al., Phys. Rev. Lett. 99 (2007) 112501

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