^{16}Be

In 2012, Spyrou et al. discovered the two-neutron emitter ^{16}Be in "First Observation of Ground State Dineutron Decay: ^{16}Be" (2012Sp01). It was populated with a single-proton removal reaction from a 53 MeV/nucleon ^{17}B beam produced with the Coupled Cyclotron Facility at the National Superconducting Cyclotron Laboratory at Michigan State University. Two neutrons were measured with the Modular Neutron Array (MoNA) in coincidence with the ^{14}Be daughter which were separated from the beam with a large-gap dipole magnet. "We performed a χ^2 minimization analysis, and the best fit to the experimental data corresponded to a two-neutron separation energy for^{16}Be of 1.35(10) MeV with a width of $0.8^{+0.1}_{-0.2}$ MeV." ^{16}Be had been shown to be unbound with respect to neutron emission by Baumann et al. in 2003 (2003Ba47).

2003Ba47 T. Baumann, N. Frank, B. A. Luther, D. J. Morrissey *et al.*, Phys. Rev. C **67**, 061303 (2003).

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