

Abstract Submitted
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The controversial ^{10}He ground state resonance: A new observation using a 2p2n-removal from ^{14}Be Z. KOHLEY, J. SNYDER, M. THOENNESSEN, National Superconducting Cyclotron Laboratory, Michigan State University, MONA COLLABORATION — A 2p2n-removal reaction from a ^{14}Be beam was used to populate the two-neutron unbound ^{10}He . A triple coincidence measurement of the $^8\text{He}+n+n$ system, using the Modular Neutron Array (MoNA) and the Sweeper magnet, allowed for the ground state resonance of ^{10}He to be reconstructed. Using a detailed Monte Carlo simulation, the resonance was fit with a Breit-Wigner lineshape having an energy of 1.60(25) MeV and width of 1.8(4) MeV. This result is in good agreement with previous measurements using 1-proton knockout reactions from ^{11}Li , yet differs from experiments which used transfer reactions to populating ^{10}He . The implications of this result, using the $^{14}\text{Be}(-2p2n)$ reaction mechanism, with respect to the previous ^{10}He measurements will be discussed.

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