

Abstract Submitted
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Using Lithium 6 in measuring Giant Monopole Resonance ANTHONY LICATA¹, North Georgia College and State University — Finding the Isoscalar Giant Monopole Resonance (ISGMR) is one of the ways to determine the compressibility of nuclear matter (K_{nm}). This K_{nm} is used to find the equation of state for nuclear matter and in astrophysics concerning supernova and neutron stars. To determine this K_{nm} more accurately, we need to survey the ISGMR for many nuclei. To study unstable isotopes the inverse reaction has to be studied. Finding the ISGMR has been done in the past with alpha scattering. For the inverse reaction using a ⁴He gas as a target is problematic so a Lithium (⁶Li) target could be a solution. For this reaction to be studied a new detector needs to be built which can measure the different products of the reaction in the test chamber. Thanks to the Youngblood Group at the Cyclotron Institute, TAMU.

¹Mentor: Dr. David Youngblood

Anthony Licata
North Georgia College and State University

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