Abstract Submitted for the DNP13 Meeting of The American Physical Society

Determining Physical Continuum Background Using the Calculated Cross-Section of the Giant Monopole Resonance¹ MICHAEL HENRY, Cyclotron Institute, Texas A&M University — The choice of continuum is a limiting factor in the cross-section measurement of giant resonances. The continuum is difficult to calculate due to a number of contributing factors; such as beam impurities, nuclear interactions, and background radiation. Assuming ideal multipole strength distributions and using experimentally determined widths and centroids, a calculation of the expected cross-section is made and then compared with the experimental cross-section measured from alpha scattering on ⁹⁰Zr. This comparison is used to refine our assumptions of the continuum.

¹Funded by DOE and NSF-REU Program.

Michael Henry Cyclotron Institute, Texas A&M University

Date submitted: 31 Jul 2013 Electronic form version 1.4