

Abstract Submitted  
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**Simulations of the In-Beam Performance of the CAESAR and Gretina Arrays With Liquid-Hydrogen and Solid Targets**<sup>1</sup> SAMANTHA WILDONGER, Ursinus College — In order to plan gamma-ray spectroscopy experiments at the National Superconducting Cyclotron Laboratory (NSCL), we used Geant4 simulations of the CAESAR and Gretina arrays with the Ursinus College Liquid Hydrogen Target and a solid  $^9\text{Be}$  target. Analysis of the simulated data allows us to evaluate the precision of measured gamma-ray intensities, photopeak efficiencies, and the in-beam energy resolution of each array. The relative advantages of each array will be discussed.

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Samantha Wildonger  
Ursinus College

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