

Abstract Submitted  
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**LISE Simulations and Analysis Used to Adjust Setup for the Mass Measurement of 46S** MILES BARBER, ALFREDO ESTRADA<sup>1</sup>, Central Michigan University — We performed ion beam simulations with the code LISE to optimize the experimental setup for a mass measurement of the neutron-rich isotope 46S. For this endeavor two main questions were the focus. 1. What wedge thickness could we add to the beamline in order to give us both beam purity (less contaminants) and low dispersion of fragments at the first timing detector? 2. How valuable is measuring the position of fragments at certain points in the beamline and can it help improve the time-of-flight resolution? Answering these two questions will bring us much closer to the goal of measuring 46S with less than 100 KeV/c<sup>2</sup> uncertainty.

<sup>1</sup>My adviser

Miles Barber  
Central Michigan University

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