

Abstract Submitted
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Development of a large acceptance, tracking gas ionization chamber¹ CHRISTOPHER DUPUIS, J.C. BLACKMON, L.E. LINHARDT, M. MATOS, Louisiana State University, D.W. BARDAYAN, Oak Ridge National Lab, G. ROGACHEV, I. WIEDENHÖEVER, Florida State University — The detection of heavy ions at forward laboratory angles provides an efficient and selective technique for identification of reaction channels in measurements with radioactive ion beams in inverse kinematics. This can be very important in some experiments as the intensity and purity of radioactive ion beams is often low. We are developing a large-acceptance (more than 60 msr), gas ionization chamber that is designed for such cases. The counter provides atomic number selectivity through relative energy loss measurements from 3 anodes. The trajectory of ions is also measured using resistive-wire readout from proportional counting wires. We have modeled the performance of the counter and are testing its performance using alpha radioactive sources.

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Christopher Dupuis
Louisiana State University

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