Abstract Submitted
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K-Isomers in the neutron-rich Hf region via fragmentation of ^{198}Pt.[1] K. SHARMA, P. CHOWDHURY, A.M. ROGERS, UMass Lowell, O.B. TARASOV, NSCL, E15130 COLLABORATION — Long-lived K-isomers in the neutron-rich Hf region have been predicted but not experimentally accessible to date. They are not only of interest from a nuclear structure perspective, but lie toward the r-process pathway and thus are relevant for heavy-element nucleosynthesis. An experiment was conducted at the NSCL to study neutron-rich nuclides in the Hf region, through the fragmentation of a newly-developed ^{198}Pt primary beam on Be and Ni targets. Additional motivations for the experiment are to observe new isotopes, as well as quantify angular momentum generation in the fragments for various targets. The products were analyzed with the A1900+S800 beamlines and implanted into a stack of Si detectors, allowing for full event-by-event particle identification, surrounded by GRETINA to detect gamma ray cascades following isomer decays. The analysis techniques will be discussed using preliminary benchmark studies with known isomers in $^{190-193}$W.

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