Abstract Submitted
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Construction of the Solenoid Spectrometer for Nuclear Astro-Physics (SSNAP) at Notre Dame[1] JACOB ALLEN, DAN BARDAYAN, DREW BLANKSTEIN, MATTHEW HALL, OSCAR HALL, JAMES KOLATA, PATRICK O'MALLEY, Univ of Notre Dame, FREDERICK BECCHETTI, Univ of Michigan, JEFFERY BLACKMON, Louisiana State Univ, STEVEN PAIN, Oak Ridge National Lab — The study of nucleon transfer reactions gives information about many nuclei involved in astrophysical processes. The design and use of new detector systems improves our ability to accurately characterize these nuclei. The Solenoid Spectrometer for Nuclear AstroPhysics (SSNAP) is a new helical orbit spectrometer being designed at the University of Notre Dame to study transfer reactions with high-energy light ion beams from the FN tandem accelerator. SSNAP incorporates a series of position-sensitive silicon detectors to be set on-axis inside the second TwinSol solenoid. SSNAP will be sensitive to light ions produced in different reactions and the charged-particle decay products from the exotic nuclei produced. Results of initial testing and future plans with this detector system will be shown in this presentation.

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