Abstract Submitted
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Current Status of HELIOS[1] JON LIGHTHALL, Western Michigan University, HELIOS COLLABORATION[2] — We are currently in the process of assembling and testing the HELIcal Orbit Spectrometer (HELIOS) at the ATLAS facility of Argonne National Laboratory. HELIOS is designed to study inverse-kinematic nucleon transfer reactions using exotic beams. These reactions are of particular interest in the studies of nuclear structure away from stability, and in nuclear astrophysics. This new type of spectrometer features a 3 Tesla, 90 cm bore superconducting solenoid. Inside the HELIOS solenoid will be a hollow detector along the magnetic field axis, in-line with the target. The detector consists of a four sided, forty-element array of position-sensitive silicon detectors. This geometry has significant advantages over conventional detectors. HELIOS will be used with secondary in-flight beams produced at ATLAS, and in the future with beams from the CARIBU (CAlifornium Rare Isotope Beam Upgrade) source. The current status of HELIOS will be presented.

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