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## SECAR: The SEparator for CAPture Reactions in Nuclear Astrophysics

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Recoil separators are used to directly measure the reaction rates of proton and alpha capture reactions that take place in stellar explosions (e.g., X-Ray Bursts, Novae, etc.). Studying these processes are crucial to understanding the mechanisms behind those explosions and the nucleosynthesis at those sites. The recoil separator SECAR is currently under construction at the National Superconducting Laboratory (NSCL) and the Facility for Rare Isotope Beams (FRIB) and it will be dedicated to measure astrophysically relevant reaction rates on  $A = 15 - 65$  isotopes. SECAR consists of 8 dipoles, 15 quadrupoles, 3 hexapoles, 1 octopole and 2 Wien filters with stringent performance conditions. This presentation will focus on the magnet acceptance procedure used to ensure that the magnets that make up SECAR will be able to perform at the desired specifications, including testing for magnetic field reproducibility. Diagnostics plans to optimize beam tuning and transmission through the separator will also be presented.

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