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Studying the $\alpha(^{14}N,\gamma)^{18}F$ Reaction with St. George¹ ALEXAN-DER DOMBOS, MANOEL COUDER, GEORG BERG, University of Notre Dame, JERRY HINNEFELD, Indiana University South Bend, PATRICIA HUESTIS, LUIS MORALES, MICHAEL MORAN, SHANE MOYLAN, DANIEL ROBERTSON, CHRISTOPHER SEYMOUR, University of Notre Dame, GWENAELLE SEYMOUR, Rutgers University, MICHAEL SKULSKI, MICHAEL WIESCHER, University of Notre Dame — The St. George recoil separator at the Nuclear Science Laboratory of the University of Notre Dame was designed to study (α, γ) reactions in inverse kinematics relevant to nuclear astrophysics. For the first time, the St. ANA Accelerator, St. George, a helium gas-jet target (HIPPO), and a particle identification system were coupled together to study the $\alpha(^{14}N,\gamma)^{18}F$ reaction. Preliminary results from the $\alpha(^{14}N,\gamma)^{18}F$ reaction will be presented. Additionally, ongoing and proposed improvements to St. George and the experimental setup will be presented.

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