

Abstract Submitted
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One-proton knockout reactions on psd-shell nuclei for relevant reaction rates in explosive Hydrogen burning processes¹ ADRIANA BANU, Department of Physics and Astronomy, James Madison University, Harrisonburg, VA 22807 — I will discuss the use of one-proton removal reactions at intermediate energies as an indirect method in nuclear astrophysics to infer stellar reaction rates with astrophysical implications for explosive hydrogen burning processes. I will refer in particular to the results of a recent experiment carried out at GANIL for a cocktail of secondary ion beams around ^{23}Al impinging on a carbon target at 50 MeV/nucleon. The longitudinal momentum distributions of one-proton knockout fragments will be reported in comparison with extended Glauber calculations. Determination of corresponding spectroscopic factors and asymptotic normalization coefficients will be presented.

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