

Abstract Submitted  
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**Relativistic effects in intermediate-energy reactions involving halo nuclei**<sup>1</sup> PIERRE CAPEL, FILOMENA NUNES, NSCL — The advent of radioactive-ion beams in the mid 80s has led to the discovery of halo nuclei. Several reaction models have been developed to infer information about this exotic nuclear structure from measurements. These models rely on different assumptions: semi-classical [1] or eikonal [2] approximations, or a discretization of the continuum [3]. Though these models are usually in fair agreement with experiment, there remain some disagreements between their predictions. In order to better understand these difference, and in particular the role played by relativistic effects at these energies, we analyse various corrections found in the literature, and compare their effects within these different reaction models.

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[3] J. A. Tostevin, F. M. Nunes, and I. J. Thompson, Phys. Rev. C 63, 024617 (2001).

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