Abstract Submitted
for the TSF16 Meeting of
The American Physical Society

Triangular exchange amplitude with off-shell Coulomb T matrix for deuteron induced reactions[1] HAO VIET NHAN TRAN, Department of Physics and Astronomy, Texas AM University-Commerce, Commerce, Texas 75429, USA, A. M. MUKHAMEDZHANOV, Cyclotron Institute, Texas AM University, College Station, Texas 77843, USA, C. A. BERTULANI, SHUBHCHINTAK FNU, Department of Physics and Astronomy, Texas AM University-Commerce, Commerce, Texas 75429, USA — The amplitude of the triangular diagram in the three-body models of exchange reactions with charged particles contains the off-shell two-body T matrix describing the intermediate-state Coulomb scattering of charged subsystems. Up to now the latter has usually been replaced by the Coulomb potential due to the computational reason. In this work, we first investigate theoretically and numerically the behavior of the exact exchange triangle amplitudes for nuclear reactions off heavy target.

[1]This work was supported in part by the U.S. DOE grant DE- FG02-08ER41533 and the U.S. NSF Grant No. 1415656

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Date submitted: 04 Oct 2016 Electronic form version 1.4