

Abstract Submitted
for the DAMOP09 Meeting of
The American Physical Society

Theoretical Fully Differential Cross Sections for Transfer-Ionization Collisions A.L. HARRIS, J.L. PEACHER, D.H. MADISON, Missouri University of Science and Technology — Theoretical fully differential cross sections (FDCS) will be compared with experimental results for transfer-ionization occurring in proton-helium collisions. In the experiments, the incident proton captures one electron from a helium atom, and the remaining electron is ionized into the continuum. The theoretical approach we use is a full four-body approach, taking each particle and interaction into account. The calculations will address the effects of the projectile-target atom interaction, projectile-residual ion interaction, electron correlation, and post-collision interaction.

A.L. Harris
Missouri University of Science and Technology

Date submitted: 26 Jan 2009

Electronic form version 1.4