

Abstract Submitted
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Ionization and excitation in collisions between antiprotons and hydrogen atoms THOMAS WINTER, Pennsylvania State University — Coupled-state cross sections have been determined for ionization and excitation in intermediate (keV)- energy collisions between antiprotons and hydrogen atoms using some of the same double-center Sturmian bases as were recently used for proton projectiles¹. The use of a double-center basis for antiproton projectiles, in spite of there being no capture channels, was suggested and carried out by Toshima with a large Gaussian basis². The present results for ionization will be compared with the double-center results of Toshima and the single-center results of Igarashi *et al.*³ and McGovern *et al.*⁴, and the crosssections for excitation of individual states up to $3d$ will be compared to the numerical results of Sakimoto⁵.

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