Fully differential cross sections for $\bar{p}$ + H collisions[1] T.G. LEE, M.F. CIAPPINA, M.S. PINDZOLA, Physics Department, Auburn University, Auburn, AL 36849, USA, J. COLGAN, Theoretical Division, Los Alamos National Laboratory, Los Almos, NW 87545, USA — We present fully differential cross sections (FDCS) for the single ionization of hydrogen atoms by antiprotons [1]. We use a time-dependent close-coupling approach to model the evolution of the electron wavefunction in the field of the incoming projectile for a range of impact parameters and for different impact energies [2]. In addition, a Fourier transform approach is used to extract FDCS for a specific projectile momentum transfer value [3]. This scheme allows us to incorporate information about the interaction of the two heavy nuclei (the so-called NN interaction) and to assess its influence in the FDCS. We compare our approach with convergent close coupling methods [4].

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