

Abstract Submitted  
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**Charge Transfer in  $C^{6+}$  Collisions with H and He<sup>1</sup>** T.G. LEE, M.S. PINDZOLA, Auburn University — Charge transfer cross sections are calculated for  $C^{6+} + H$  and  $C^{6+} + He$  collisions using a time-dependent close-coupling method in Cartesian coordinates. Capture cross sections into the  $1s$ ,  $2l(l = 0 - 1)$ ,  $3l(l = 0 - 2)$ , and  $4l(l = 0 - 3)$  subshells of  $C^{5+}$  are found for projectile energies ranging from 5.0 keV/amu to 15.0 keV/amu. Comparisons are made with previous calculations and recent experiments. The atomic collision data will be used to better understand the interaction of solar wind ions with interplanetary atoms.

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