## HEAVY PARTICLE ATOMIC COLLISIONS IN ASTROPHYSICS: BEYOND H AND He TARGETS<sup>1</sup>

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The physical conditions relating to the emission of x-rays from Jovian and cometary atmospheres and to supernova ejecta are briefly described. Emphasis is placed on elucidating the relevance and importance of atomic collision processes, the availability of data, and the outstanding data needs for modeling these environments. Some preliminary theoretical studies of electron capture for important collisions systems, involving molecular and atomic metal targets, are presented.

1. Abstract of published paper: *Atomic Processes in Plasmas*, AIP Conference Proceedings 443 (AIP, New York, 1998), p. 185.