Abstract Submitted for the DAMOP09 Meeting of The American Physical Society

Electron impact ionization of atomic targets at relativistic energies M.A. UDDIN, A.K. BASAK, Department of Physics, The University of Rajshahi, Rajshahi, Bangladesh, B.C. SAHA, Department of Physics, Florida A&M University, Tallahassee, FL-32307 — The huge demand and scarcity of electron impact ionization cross sections (EIICS) that are essential not only in modeling but also in basic researches can be best filled in by simple to use analytical models [1] that are sufficiently accurate and provide fast generation of EIICS data over wide domain. We report few such models and compare their productive powers in terms of few adjustable parameters. Details of our results will be presented in the conference. [1] A. K. F. Haque, M. A. Uddin, A. K. Basak, K. R. Karim, B. C. Saha, and F. B. Malik, Phys. Scr. 74, 377 (2006); Phys. Rev A 73, 052703; M. A. R. Patoary, M. A. Uddin, A. K. F. Haque, M. Shahjahan, A. K. Basak, M. R. Talukdar and B. C. Saha, Int. J. Quan. Chem (in press). Supported by NSF CREST.

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