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## Ionization of Lithium using the HI-5 Model<sup>1</sup> A L HARRIS, J LYON,

A PLUMADORE, M BATES, Illinois State University — The study of heavy-ion collisions with atoms is an increasingly active area of collision physics. We introduce the Heavy-Ion 5-Body (HI-5) model for charged particle collisions, which is only recently possible due to improvements in computing capabilities. Using our model, we present fully differential cross sections for inner and outer shell ionization of lithium using heavy-ion projectiles. Results are compared to other theoretical models, and the role of electron correlation is studied.

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