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Application of the HI-5 Model to Proton-Impact Ionization of Lithium[1] ALEX PLUMADORE, JESSE LYON, MASON BATES, ALLISON HARRIS, 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 proton-impact ionization of lithium. Results are compared to other theoretical models, and the role of electron correlation is studied.

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