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Simulating Ion Trajectories at Surfaces PATRICK JOHNSON, CHAD SOSOLIK, Clemson University — Low and Hyperthermal energy ion scattering can be a powerful probe of surfaces, provided the trajectories and the physics that govern them are modeled effectively. Such analysis requires predictive simulations to determine where on the surface the scattering events occurred. These simulations generally use molecular dynamics, which is a computationally expensive process. Here we will present a simulation which replicates predictive spectra of Low and Hyperthermal energy ion scattering, using molecular dynamics with constraints to reduce the required computation time.

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