

Abstract Submitted
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Comparison of spectral Boltzmann and Fokker-Planck solvers for plasma relaxation JEFF HAACK, MICHAEL MURILLO, Los Alamos National Laboratory — The Fokker-Planck operator is an approximation of the Boltzmann collision operator for charged particles resulting from the dominance of small angle interactions. However for many relevant plasmas the larger angle collisions contained in the full Boltzmann equation have a nontrivial effect on the relaxation rate to equilibrium. I will compare deterministic numerical results for the Boltzmann and Fokker-Planck operators to show this difference, as well as an analytical result relating the error between the two models.

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