

Abstract Submitted
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Kinetic Theory and Electron Transport ASHTON BLOOM, DUSTIN HEMPHILL, Slippery Rock Univ — Progress toward the study of electron transport properties in exotic materials, such as graphene, is discussed. Kinetic theory provides a theoretical framework to study non-equilibrium dynamics. Numerical solutions to the relativistic Boltzmann equation are found by stochastically estimating collisions rates within spatially discretized cells. As a first step the case of a massless gas in a static box is considered. Both the development and testing of the algorithm will be discussed.

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