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Fast Partons as a Source of Energy and Momentum in a Thermal Quark Gluon Plasma RICHARD NEUFELD, Duke University — An interesting problem in the study of quark gluon plasma (QGP) physics is to determine the effect of fast partons on the bulk behavior of the evolving medium. Recent experimental results supporting the possible formation of a mach cone make this problem all the more relevant. One promising approach to determine the influence of a fast parton on an evolving QGP is to treat the energy and momentum deposited by the parton as a perturbation on the bulk hydrodynamic equations governing the system. I will present results for such a perturbative source term calculated in the context of a Vlasov-Boltzmann evolution.

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