

Abstract Submitted  
for the HAW09 Meeting of  
The American Physical Society

**Infinite Matter Calculation of Jet Energy-Loss with the Parton Cascade Model** STEFFEN BASS, Duke University — Parton Cascade Models, which describe the full time-evolution of a system of quarks and gluons using pQCD interactions are ideally suited for the description of jet production, including the emission, evolution and energy-loss of the full parton shower in a hot and dense QCD medium. However, before applying the PCM to the off-equilibrium dynamics of the early stage of an ultra-relativistic heavy-ion collision, it is important to validate these calculations against analytically calculable test cases. In this talk, I shall present results of PCM calculations for parton energy loss in infinite matter and compare them to some analytically accessible test cases.

Steffen Bass  
Duke University

Date submitted: 15 Jun 2009

Electronic form version 1.4