

Abstract Submitted  
for the DNP08 Meeting of  
The American Physical Society

**Propagating Mach Cones in a Viscous Quark-Gluon Plasma** R. BRYON NEUFELD, Duke University — I will discuss the space-time distribution of energy and momentum deposited by a fast parton traversing a perturbative quark-gluon plasma (arXiv:0805.0385 [hep-ph]). I use this distribution as a source term for the linearized hydrodynamical equations of the medium and present the resulting dynamics for three different values of the shear viscosity to entropy density ratio,  $\eta/s$ :  $1/4\pi$ ,  $3/4\pi$  and  $6/4\pi$ . I show that well defined Mach cones are found for  $\eta/s = 1/4\pi, 3/4\pi$  but the conical structure begins to smear out for  $\eta/s = 6/4\pi$ .

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Date submitted: 20 Jun 2008

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