

Abstract Submitted  
for the APR05 Meeting of  
The American Physical Society

**Photon Elliptic Flow and Jet Photon Correlations in Heavy Ion Collisions** RAINER FRIES, University of Minnesota — It has been shown that jets interacting with the medium in high energy heavy ion collisions are a bright source of photons at intermediate transverse momentum. We study this jet photon conversion process in detail and show that these photons exhibit an elliptic azimuthal asymmetry  $v_2$  which is negative with respect to the  $v_2$  of hadrons. We also investigate photon-jet correlations and the implications of the jet photon conversion process for studies of energy loss with photon-tagged jets.

Rainer Fries  
University of Minnesota

Date submitted: 18 Jan 2005

Electronic form version 1.4