

Abstract Submitted
for the OSS05 Meeting of
The American Physical Society

Towards photon intensity interferometry in relativistic heavy-ion collisions EVAN FRODERMANN, The Ohio State Univeristy — Hanbury-Brown-Twiss (HBT) intensity interferometry is a powerful tool that probes the size of the fireball in a heavy ion collision. Pion interferometry accesses the final state of the fireball, and its information is focussed at the time of decoupling from strong interactions. Photon interferometry, however, can probe geometry and dynamics of the initial stages of the fireball and may lead to insights into the space-time evolution of a quark-gluon plasma. In this contribution the one particle photon emission rate from a (2+1)-dimensional hydrodynamic evolution of the fireball is investigated. This emission rate is the first step in calculating full HBT radii using thermal photons, including all relevant production processes.

Evan Frodermann
The Ohio State Univeristy

Date submitted: 17 Mar 2005

Electronic form version 1.4