Abstract Submitted
for the DPP05 Meeting of
The American Physical Society

Fokker-Planck Simulations of Transport in Magnetized Hohlraum Gas-Fill Plasma ROBERT KINGHAM[1], Imperial College London, MICHAEL J. EDWARDS[2], LLNL — Conditions in the heated 'gas-fill' plasma in ICF hohlraums mean that the collisional mean-free-path is a significant fraction of the important scale-lengths. This suggests that non-local transport effects are prevalent. However, significant levels of $\nabla n \times \nabla T$ magnetic fields have been observed in Nova scale hohlraums. Conceivably, strong magnetization could mitigate non-locality. We report on Fokker-Planck simulations showing the effect of magnetic fields on thermal transport. They were carried out using IMPACT [Kingham & Bell, J. Comput. Phys. **194**, 1 (2004)] and focus in on a representative region of plasma underneath a typical heater beam. The results suggest that the usual figure of merit for non-local effects in the absence of magnetic fields, $k\lambda_c$ (where $\lambda_c = \sqrt{g\lambda_{ei} g\lambda_{ee}}$), can be extended in an appropriate way to magnetized plasma. This work complements recent analytical treatments of non-local heat flow in magnetized plasma [Brantov *et al.* Phy. Plasmas **10**, 4633 (2003); Frolov *et al.* Submitted to Phys. Plasmas] and additionally includes phenomena (e.g. Nernst advection) not present in those models.

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Date submitted: 22 Jul 2005 Electronic form version 1.4