Abstract Submitted for the MAR09 Meeting of The American Physical Society

Thermal Convection in the Presence of Internal Heating GABRIEL SEIDEN, STEPHAN WEISS, EBERHARD BODENSCHATZ, Max Planck Institute for Dynamics and Self-Organization — Thermal convection in the presence of internal heat sources is an important mechanism of heat transfer in geophysics, particularly in planetary mantle convection. Carefully controlled laboratory studies of this mechanism are, however, scarce. We present experimental results on the effect of internal heating on Rayleigh-Bénard convection, where the heat sources are induced by IR absorption. The results are compared with available theoretical predictions.

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Date submitted: 21 Nov 2008 Electronic form version 1.4