1023-76-1072 **Matthew J Glomski*** (mglomski@buffalo.edu). *Further results on the critical Rayleigh number R_* and wave number k_* for the planar Bénard problem with asymmetric boundary conditions.* Preliminary report.

The planar Bénard problem concerns the onset of thermal instability in a thin layer of fluid heated from below. Here the case of asymmetric boundary conditions is considered: a no-slip lower bounding surface, and a stress-free upper surface. The neutral stability curves $F(k, R) = 0$ are examined to address the question of uniqueness of the critical Rayleigh number R_* and wave number k_*. (Received September 25, 2006)