1053-76-169   **Xiaoming Wang*** (`wxm@math.fsu.edu`), 208 James J. Love Building, Florida State University, Tallahassee, FL 32306. *Asymptotic behavior of the Brinkman-Boussinesq system at small Darcy number.* Preliminary report.

We investigate the asymptotic behavior of the solutions to the infinite Darcy-Prandtl number Brinkman-Boussinesq system for convection in porous media at small Darcy number. We show that the limit is the infinite Darcy-Prandtl number Darcy-Boussinesq system for convection in porous media. The limit is a singular one with a viscous boundary layer. (Received September 01, 2009)