Florin P Boca\* (fboca@illinois.edu), Department of Mathematics, University of Illinois, 1409 W Green Street, Urbana, IL 61801. The distribution of the free path length of the linear flow in a honeycomb. Preliminary report.

Some asymptotic results concerning, in particular, the distribution of the free path length of the linear flow in a honeycomb lattice, with pockets of radius r->0, will be presented. Both cases where the starting point is the center of the hexagon, and when it is randomly chosen, will be discussed. The first part is joint work with R. Gologan. (Received February 02, 2009)