1026-52-145 **Peter Brass*** (`peter@cs.ccny.cuny.edu`), City College of New York, Department of Computer Science, 138 Street at Convent Avenue, New York, NY 10463. *Distributing an infinite point sequence uniformly in a region.*

Given a convex set C, one way to measure how evenly a point set $p_1, \ldots, p_n$ is distributed in C is the ratio of the inradius $\mathrm{inradius}(p_1, \ldots, p_n) = \sup_{q\in C} \inf_{1\le i\le n} d(q, p_i)$ to the minimum distance in the set. It is easy to see that $\frac{\mathrm{inradius}(p_1,\ldots,p_n)}{\mathrm{mindist}(p_1,\ldots,p_n)} \ge 1/\sqrt{3}$, and sections of the triangular lattice reach that lower bound. In this talk, we look at infinite sequences $p_1, p_2, \ldots$ such that each beginning part $p_1, \ldots, p_n$ is well-distributed in this sense. specifically, that $\limsup_{n\to\infty} \frac{\mathrm{inradius}(p_1,\ldots,p_n)}{\mathrm{mindist}(p_1,\ldots,p_n)}$ is small. If we construct the point set by refining a triangular lattice section, this lim sup is 1, and the same can be reached from any starting set by the process of Voronoi insertion, as observed recently in a paper by Teramoto, Asano, Katoh and Doerr. This suggests the question whether there is any sequence for which the lim sup is less than one. We give a lower bound of $1/\sqrt{2}$. This is related to a property of the minimum angles of the sequence of Delaunay-triangulations of these sets. (Received February 23, 2007)