1046-51-527   **Nicholas L Michaud*** (`nm367@bard.edu`), 18 Malverna Rd., Boston, MA 02131, and **Liz Anet** (`lm763@bard.edu`), **Adam Chodoff** (`ac194@bard.edu`) and **Viriya Ratanasangpunth** (`vr239@bard.edu`). *On the realizability of certain graphs as Delaunay Tessellations.*

Given a graph G, Dillencourt et al. proved that G is realizable as a Delaunay tessellation if only if its stellation is inscribable. In this talk, we provide some conditions for graphs of n-gons with an arbitrary number of verticies inside the convex hull to be realizable as Delaunay tessellations using Dillencourt's results. We then consider the implications of such conditions on Voronoi Diagrams, which are the dual graphs of Delaunay tessellations. (Received September 06, 2008)