1135-05-1957 Marie Meyer* (marie.meyer@uky.edu) and Benjamin Braun. Laplacian Simplices.

There are many advantageous ways to associate a polytope to a graph $G$. A recent construction is to consider the convex hull of the rows of the Laplacian matrix of $G$ to form what is called the Laplacian simplex, $T_G$. In this talk we focus on properties of $T_G$ including reflexivity, the integer decomposition property, and unimodality of Ehrhart $h^*$-vectors according to graph type. (Received September 25, 2017)