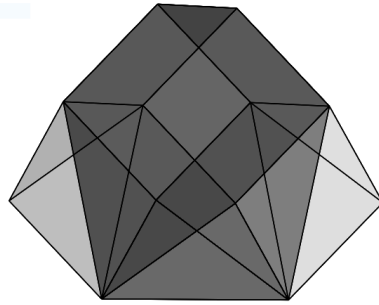


Self-Polar Polytopes

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Abstract

The only set which is equal to its polar set is the unit ball, but there are many sets which are orthogonal transformations of their polar sets. This talk will discuss polytopes which are equal to orthogonal transformations of their polar sets, with special emphasis on those that are equal to their negative polar sets. Topics under consideration will include existence, construction, facial structure, vertex graphs, and the place of these polytopes within the broader set of self-dual polytopes.

Keywords: polytope, self-dual polytope. orthogonal transformation, polar set.