1088-05-268   **Ilanit Helfand*** (`ilanit.helfand@gmail.com`). *Subdivision in Abstract Polytopes.*

In contrast to the study of convex polytopes, the study of abstract polytopes allows two 2 -faces to intersect in more than one edge. This generality permits us to apply the idea of edge subdivision to abstract polytopes. That is, we can add a vertex to the interior of an edge, thus replacing the edge with two new edges and a new vertex. We will explore the impact of subdivision on symmetries of polytopes, and discuss how we wan generalize this construction. Additionally, we will talk about a construction which produces polytopes which are dual to subdivided polytopes. We will also discuss the relationship between subdivided polytopes and Kleetopes. (Received February 12, 2013)