

1077-05-1636

Luis G Serrano* (serrano@lacim.ca), CP 8888 Succ. Centre Ville, Montreal, Quebec H2X3Y7, Canada, and **Christian Stump** (christian.stump@lacim.ca), CP 8888 Succ. Centre Ville, Montreal, Quebec H2X3Y7, Canada. *Bijections between k -triangulations, k -fans of Dyck paths, and certain pipe dreams.*

We present a bijection between k -triangulations of an n -gon and k -fans of Dyck paths (both generalizations of well known Catalan objects). This bijection goes through widely used objects in combinatorics such as pipe dreams and flagged tableaux. If time permits, we will discuss a generalization of the associahedron obtained in this manner, and mention a conjectured cyclic sieving phenomenon. (Received September 20, 2011)