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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 generalisation of the associahedron obtained in this manner, and mention a conjectured cyclic sieving phenomenon. This is joint work with Christian Stump.