

Combinatorics and Geometry — Seminar —

THE CATERPILLAR POLYTOPE AND ITS RELATIVES

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Abstract

In this talk I will present a family of beautiful polytopes arising from toric degenerations of the moduli spaces of n points on the projective line. They depend on an integer n , a weight $w \in \mathbb{Z}_{>0}^n$, and a trivalent tree T with n leaves. I will discuss properties of these polytopes, such as when they admit a unimodular triangulation, as well as a formula for their Ehrhart polynomial. In the end I will present some open questions regarding their h -vectors. This is joint work with Benjamin Howard.

Wednesday, February 20
5:15 p.m.
Room 381-U

<http://math.stanford.edu/~sampayne/seminar/>