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Satyan L Devadoss* (satyan.devadoss@williams.edu), Department of Mathematics and Statistics, Bronfman Science Center, Williamstown, MA 01267. *Associahedra in Tori and Projective Spaces.*

We look at arrangements on the tori coming from moduli spaces of real Riemann spheres. We compare it with the braid arrangement in projective space, following Kapranov, and show a combinatorial equivalence of varieties under blow-ups of certain intersections. This leads to new constructions of the Stasheff polytope (associahedron) as truncated products of simplices. (Received January 02, 2003)