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The 27 Trees on a Cubic Surface

We explore the tropicalization of moduli spaces in classical algebraic geometry. Our primary example is the moduli space of marked del Pezzo surfaces of degree 3. Its universal family tropicalizes to a 6-dimensional fan with millions of cones. Its fibers are the tropical cubic surfaces. These are characterized by their arrangement of 27 trees, one for each (-1) curve. This is joint work with Qingchun Ren, Steven Sam and Kristin Shaw.