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Gröbner degenerations of $\overline{M}_{0,n}$ and trees

The moduli space $\overline{M}_{0,n}$ has a natural embedding in a product of projective spaces, due to Keel and Tevelev, with very nice combinatorial and algebraic properties. In this talk, I will describe a family of especially well-behaved Gröbner degenerations of the moduli space. Specifically, these degenerations yield, in the limit, reduced unions of coordinate hyperplanes (i.e. squarefree monomial ideals), which can moreover be described and enumerated in a combinatorial manner. Our result recovers certain known descriptions of the multidegrees of the embedding, and it also allows us to give minimal generators for the embedding's saturated multihomogeneous ideal. This is joint work with Tianyi Yu and Ian Cavey.