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Limits in tropical compactifications and tropical psi classes

Tropical intersection theory allows us to express intersections of subvarieties of algebraic tori using piecewise linear data, in particular polyhedral complexes in \mathbb{R}^n . In a similar vein, a method due to Katz shows how to use tropical data to compute flat limits of subvarieties X_t of a toric variety Y , where as $t \rightarrow 0$, X_t degenerates to a union of boundary strata of Y (with multiplicities). I will describe an extension of this method in which X_t instead degenerates to a union of boundary strata of an appropriately stratified subvariety $\overline{M} \subseteq Y$. Time permitting, I will describe an application to tropical psi classes on the moduli space of genus zero curves. This work is joint with Sean T. Griffin, Rohini Ramadas and Rob Silversmith.