Hannah Markwig: Tropicalizing rational relative Gromov-Witten theory of P^1

We show that the relative stable map compactification of M_0,n (for maps to P^1, relative to two points) is a tropical compactification. Furthermore, the tropicalization of the open part equals the tropical space of relative stable maps to P^1. Consequently, the Chow ring of the relative stable map space can be computed by means of tropical intersection theory in an intuitive way. The correspondence theorem for Hurwitz numbers, and more generally, genus 0 relative Gromov-Witten invariants, is now an easy corollary of this strong connection on the level of moduli spaces. This is joint work with Renzo Cavalieri and Dhruv Ranganathan.Â