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Tropical amoebas and symplectic geometry

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Tropical geometry arises in a variety of ways, and can for example be thought of as a refinement of the combinatorial data (a polyhedral fan) defining a toric variety. Given the symplectic version of this construction (using the moment polytope), it is natural to expect a symplectic incarnation of tropical geometry to arise. The aim of this talk is to show how the geometry of the space of Kähler metrics on a toric manifold provides this link. More precisely, we show that over the geodesic boundary of the space of toric K"ahler metrics, divisors in the toric manifold collapse to (pieces of) tropical amoebas inside the moment polytope. Time permitting, I will indicate some further developments regarding wonderful varieties.
(Based on joint work with C.Florentino, J.Mourão, and J.P.Nunes)
