1100-53-151 **Gabriel D Kerr***, Cardwell Hall, Mathematics Department, Kansas State University, Manhattan, KS 66506. *Tropical D-branes, tropical solitons*.

The mirror to a toric variety, or DM toric stack, is a Landau-Ginzburg model on the complex torus. A generating set of D-branes for an open string theory can be identified with the vanishing thimbles of the Landau-Ginzburg potential. On a fiber of the potential, the vanishing thimbles give their respective cycles which are Lagrangian spheres. In this talk, I will explain how a tropical version of this story allows one to locate vanishing cycles geometrically and identify their intersections. This results in a partial description of the Fukaya-Seidel category of the Landau-Ginzburg model. (Received February 06, 2014)