David Nadler: Â Singular Lagrangians

Singular Lagrangians arise as the classical support of objects in mirror symmetry and sheaf theory. We'll present a solution to the analogy

smooth function: Morse function: singular Lagrangian: ???

We'll introduce a class of elementary Lagrangian singularities, called arboreal singularities, and show that every Lagrangian singularity admits a deformation to a singular Lagrangian with arboreal singularities. Time permitting, we'll explain how to use this to calculate microlocal sheaves in parallel to the Morse calculation of cohomology.