Andrew A Cooper* (andrew.cooper@math.ncsu.edu), Box 8205, North Carolina State University, Raleigh, NC 27695. Lagrangian mean curvature flow, the Maslov class, and special lagrangians.

Mean curvature flow, the downward gradient flow for the area functional, preserves the Lagrangian condition if the ambient manifold is Kähler-Einstein. Thomas-Yau, Joyce, and others have conjectured that mean curvature flow should find Lagrangian minimizers; however the development of singularities interferes with this approach. We will discuss recent progress in using the Maslov class of the evolving submanifold to understand the development of singularities. (Received September 20, 2015)