1047-14-421 Rina Anno* (anno@math.uchicago.edu), 5734 S University Ave, University of Chicago Math Department, Chicago, IL 60637. Stability conditions, Springer fibers and braids with multiplied threads.

This talk is based on a joint work with Roman Bezrukavnikov. Let g be a semisimple Lie group of type ADE, B the flag variety, and U the Grothendieck-Springer resolution for g. Using the affine braid group action on $D_B^b(U)$, we describe a locally closed submanifold in the space of Bridgeland's stability conditions for this triangulated category. The construction of the braid group action involves functors between derived categories for resolutions of different Slodowy slices. The induced maps on the spaces of stability conditions give a stratification of these submanifolds. This geometric picture may be described combinatorially in terms of some version of tangle calculus. (Received February 02, 2009)