Positivity in the Symplectic Category.

For flag varieties, the multiplicative coefficients of ordinary Schubert calculus are positive for (easy) geometric reasons. The equivariant cohomology and K-theory also satisfy a generalized notion of positivity (Graham, Kumar, Peterson, Buch, Anderson and others). For equivariant theories, there is also a notion of positivity given by the restriction of the cohomology classes to fixed points of a maximal torus action on the flag variety, and this also has been shown to be positive (Billey, generalized by Knutson). In this talk, I will what happens outside the algebraic category. This is joint work with Susan Tolman, University of IL, Champaign-Urbana. (Received September 21, 2010)