1120-14-219   **Rebecca Tramel*** (`rtramel@illinois.edu`), University of Illinois, Department of Mathematics, 1409 W Green Street, Urbana, IL 61801. *Bridgeland stability conditions on surfaces.*

Abstract: Let X be a smooth projective surface. In 2002, Bridgeland defined a notion of stability for objects in $\mathcal{D}^b(X)$, which can be thought of as a generalization of slope stability for vector bundles on curves. The work of Bayer-Macri and of Toda shows that there are nice connections between deformations in $\mathrm{Stab}(X)$, the space of all Bridgeland stability conditions on X and the birational geometry of X. I will discuss the case in which X contains a smooth projective curve C of negative self-intersection. (Received February 22, 2016)