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Cristian M Martinez* (martinez@math.ucsb.edu), Department of Mathematics, South Hall, Room 66, University of California, Santa Barbara, CA 93106. *Gieseker moduli as Bridgeland moduli.*

Bridgeland Stability Conditions have become an important tool to study the geometry of moduli spaces of Gieseker semistable sheaves, specially for surfaces, where they have been used to describe nef and effective cones, change of polarization, and much more. Of course, the first step is finding stability conditions for which the only semistable objects are the Gieseker semistable sheaves. In this talk I will review some of the main ideas involving the interplay between wall-crossing for stability conditions and the birational geometry of the Gieseker moduli space on surfaces. I will hint how similar ideas can be used to study the Gieseker moduli on threefolds for special types of Chern characters. This talk is based on past work with Aaron Bertram and current work with Benjamin Schmidt. (Received January 19, 2016)