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Eric Miles* (ewmiles@morris.umn.edu) and **Daniele Arcara**. *Projectivity of Moduli Spaces of Bridgeland Semistable Objects on Del Pezzo Surfaces*. Preliminary report.

Bridgeland Stability Conditions can be thought of as tools for creating and varying moduli spaces parameterizing objects in the derived category of a variety X . For us, X will be S , a surface. Unlike more classical notions of stability, little is known in general about the spaces of Bridgeland semistable objects. To gain knowledge of the structure of these spaces, one can look to exploit the relationship that certain Bridgeland stability conditions share with representations of a quiver. This was done by Arcara-Bertram-Coskun-Huizenga for $S = \mathbb{P}^2$ and we carry out the program on the surfaces $\mathbb{P}^1 \times \mathbb{P}^1$ and $Bl_p\mathbb{P}^2$. Understanding the Bridgeland stability of line bundles and certain torsion sheaves is crucial to this adaptation. (Received August 28, 2014)