

1117-14-51 **Tif Shen***, jifeng.shen@yale.edu. *Compactified Jacobians and Break Divisors*. Preliminary report. We apply tropical methods to study the geometry of compactified Jacobians of genus g curves \mathcal{X} over a DVR. Let $\overline{\mathcal{J}}_g(\mathcal{X})$ be the degree g compactified Picard scheme of \mathcal{X} introduced by Caporaso. Using break divisors, we show that all degree g Simpson compactified Jacobians of \mathcal{X} are isomorphic to $\overline{\mathcal{J}}_g(\mathcal{X})$. To do so, we prove that slope-stable rank-1 torsion-free sheaves on X are described by break divisors. (Received December 27, 2015)