

1137-14-256

**Amos Turchet\*** ([aturchet@uw.edu](mailto:aturchet@uw.edu)), Department of Mathematics, University of Washington, Seattle, WA 98195-4350, and **Kenny Ascher** and **Kristin DeVleming**. *Moduli spaces of stable pairs, uniformity of integral points and positivity of the log cotangent bundle.*

The number of integral points in a curve of log general type is finite and it is natural to ask how it varies in a (stable) family. The problem is related to the geometry of stable families of stable pairs and their fibered power. In this joint work (in progress) with Kenny Ascher and Kristin DeVleming we show that a conjecture of Vojta implies that the number is uniformly bounded and the bound depends only on the geometric invariants defining the curves involved. We also partially extend this to higher dimensions, using a suitable model of the moduli stack of stable pairs. If time permits I will discuss how very interesting problems arise already in dimension 2, and the role played by the log-cotangent bundle and its positivity. (Received February 05, 2018)