Li, Chunyi

Summary: We prove the conjectural Bogomolov-Gieseker type inequality for tilt-stable objects on each Fano threefold $X$ of Picard number 1. In view of the previous works [A. Bayer et al., J. Algebraic Geom. 23, No. 4, 693–710 (2014; Zbl 1310.14026)], [A. Bayer et al., Invent. Math. 206, No. 3, 869–933 (2016; Zbl 1360.14057)] and [A. Bayer et al., J. Algebraic Geom. 23, No. 1, 117–163 (2014; Zbl 1306.14005)] on Bridgeland stability conditions, this induces an open subset of geometric stability conditions on $D^b(X)$. We also get a new stronger bound for Chern characters of slope semistable sheaves on $X$.

MSC:
14F05 Sheaves, derived categories of sheaves, etc. (MSC2010)
14J45 Fano varieties

Keywords:
stability condition; Fano threefolds; Bogomolov-Gieseker type inequality

Full Text: DOI

References:

This reference list is based on information provided by the publisher or from digital mathematics libraries. Its items are heuristically matched to zbMATH identifiers and may contain data conversion errors. It attempts to reflect the references listed in the original paper as accurately as possible without claiming the completeness or perfect precision of the matching.