

arXiv.org > math > arXiv:1107.0877

Mathematics > Algebraic Geometry

On the behaviour of strong semistability in geometric deformations

Holger Brenner, Axel Stäbler

(Submitted on 5 Jul 2011 (v1), last revised 13 Jul 2012 (this version, v4))

Let \$Y \to B\$ be a relative smooth projective curve over an affine integral base scheme \$B\$ of positive characteristic. We provide for all prime characteristics example classes of vector bundles \$\mathcal{S}\$ over \$Y\$ such that \$\mathcal{S}\$ is generically strongly semistable and semistable but not strongly semistable for some special fibre. This also provides new examples of the behaviour of Hilbert-Kunz multiplicities in geometric families.

Comments: 12 pages, v2: extended results and fixed several typos, v3: fixed typos, improved exposition, 1 new example, v4: Added some references, improvements in exposition
Subjects: Algebraic Geometry (math.AG); Commutative Algebra (math.AC)

MSC classes: 14H60 (Primary) Cite as: arXiv:1107.0877 [math.AG] (or arXiv:1107.0877v4 [math.AG] for this version)

Submission history

From: Axel Stäbler [view email] [v1] Tue, 5 Jul 2011 14:15:06 GMT (14kb) [v2] Mon, 8 Aug 2011 06:47:39 GMT (15kb) [v3] Tue, 6 Dec 2011 09:14:01 GMT (16kb) [v4] Fri, 13 Jul 2012 06:58:46 GMT (16kb)

Which authors of this paper are endorsers?

Link back to: arXiv, form interface, contact.

Search or Article-id

(<u>Help</u> | <u>Advance</u> All papers

Download:

- PDF
- PostScript
- Other formats

Current browse cont math.AG

< prev | next >

new | recent | 1107

Change to browse b

math math.AC

main.AC

References & CitatioNASA ADS

Bookmark(what is this?)