Ho, Man-Ho

The flat Grothendieck-Riemann-Roch theorem without adiabatic techniques. (English)


Summary: In this paper we give a simplified proof of the flat Grothendieck-Riemann-Roch theorem. The proof makes use of the local family index theorem and basic computations of the Chern-Simons form. In particular, it does not involve any adiabatic limit computation of the reduced eta-invariant.

MSC:

19L10 Riemann-Roch theorems, Chern characters
19K56 Index theory
14C40 Riemann-Roch theorems

Keywords:

flat $K$-theory; Grothendieck-Riemann-Roch theorem; eta form

Full Text: DOI arXiv

References:

[21] Bismut, J.-M.; Freed, D. S., The analysis of elliptic families. II. Dirac operators, eta invariants, and the holonomy theorem,
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.