



The Hong Kong University of Science and Technology

Department of Mathematics

MPhil THESIS EXAMINATION

Equivariant Vector Bundles On Toric Varieties

By

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ABSTRACT

A.A. Klyachko has pointed out an equivalence of category can be established between toric vector bundles over a toric variety and multi-filtered vector spaces subject to compatibility condition. This allows one to investigate a lot of properties of toric vector bundles by combinatorics. Klyachko has demonstrated this method on complex projective surface. In this thesis, we apply his ideas to study toric bundles on Hirzebruch surfaces. The focus is on characteristic classes and stability conditions.

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Time : 10:00 a.m.

Venue : Online via ZOOM

ID: 921 8114 5350 (Passcode: 656715)

<https://hkust.zoom.us/j/92181145350>

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(Open to all faculty and students)

The student's thesis is now being displayed on the reception counter in the General Administration Office (Room 3461).