



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

PHD STUDENT SEMINAR

Bridgeland stability conditions of sheaves on blow up surfaces

By

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Abstract

Tom Bridgeland introduced a new stability condition which is motivated from the study of D branes in string theory in 2003. The construction of Bridgeland stability on surfaces are well known. Let $\pi : X \rightarrow Y$ be a blow up map between smooth surfaces. If Y has a Bridgeland stability condition, then we can construct a Bridgeland stability condition on X . We want to know that if a sheaf F on Y is stable, then what can we say about π^*F ? In this talk, I will try to give some results of this question when F is line bundle or when it supported on the exceptional curve.

Date : 15 May 2025, Thursday

Time : 11:00am

**Zoom Meeting : <https://hkust.zoom.us/j/2245558991>
(Passcode: HKUST)**

All are Welcome!