

## The Hong Kong University of Science and Technology

### **Department of Mathematics**

### **Seminar on Pure Mathematics**

## The Hull-Strominger system over Riemann surfaces

by

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#### Abstract

The Hull-Strominger system is a system of nonlinear PDEs describing the geometry of compactification of heterotic strings with flux to 4d Minkowski spacetime, which can be regarded as a generalization of Ricci-flat Kahler metrics coupled with Hermitian Yang-Mills equation on non-Kahler Calabi-Yau 3-folds. In this talk, we present an explicit construction of smooth solutions to the Hull-Strominger system with infinitely many topological types and sets of Hodge numbers, thus showing that there may be infinitely many candidates in the string theory landscape when flux is present.

- Date: Tuesday, 20 August 2019
- Time: 4:00p.m. 5:00p.m.

Venue: Room 5508, Academic Building (near Lifts 25-26), HKUST

All are welcome!