

**ATOMIC SHEAVES, LAGRANGIAN SUBVARIETIES, AND
BRIDGELAND MODULI SPACES**

Speaker: Hanfei Guo
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Time: Tue, Nov. 5, 2024, 13:45-14:15

Venue: Room 102, SCMS

Abstract:

Let X be a Gushel--Mukai fourfold. In this talk, we focus on the hyper-Kähler variety M , which arises as a Bridgeland moduli space of stable objects in the Kuznetsov component of X . First, we construct Lagrangian subvarieties of M using moduli functors between the Kuznetsov components of X and its hyperplane sections. Then, we provide new examples of atomic sheaves and projectively hyperholomorphic vector bundles on M , constructed from these Lagrangian subvarieties. This is based on two joint works with Soheyla Feyzbakhsh, Zhiyu Liu, and Shizhuo Zhang.