







复旦大学数学科学学院

数学综合报告会

报告题目: Derived categories of hyper-Kähler varieties

报告人:张儒轩(上海数学中心)

时间: 2025-12-26 星期五 14:30-15:00

地点: 光华楼东主楼2201

报告摘要:

In this talk, I will propose a derived Torelli conjecture for hyper-Kähler varieties. Roughly speaking, we expect that the topological K-theory of a hyper-Kähler variety governs its derived category. We prove several examples supporting this Torelli conjecture, including: the D-equivalence conjecture for hyper-Kähler varieties of K3^{[n]}-type, Huybrechts' conjecture on the derived categories of moduli spaces of sheaves on a K3 surface, and Galkin's conjecture on the derived category of Fano variety of lines on a cubic fourfold.

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