



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY

Department of Mathematics

ALGEBRA AND GEOMETRY SEMINAR

Microlocalization on derived moduli spaces

by

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Academia Sinica

Abstract

The classical formalism of microlocal sheaf theory à la Kashiwara-Schapira is very useful in the study of manifolds. I will describe a generalization to the context of derived algebraic geometry, which is useful in the study of derived moduli spaces. For example, I will discuss how it gives a new perspective on topics like the virtual fundamental class, categorified Donaldson-Thomas theory, and the critical or 3d cohomological Hall algebras of Kontsevich-Soibelman. Based on forthcoming joint work with Tasuki Kinjo.

Date : 25 October 2023 (Wednesday)

Time : 3:00pm – 4:30pm

Venue : Room 5566 (Lifts 27/28)

All are Welcome!