



# ALGEBRA AND GEOMETRY SEMINAR

The Hong Kong University of Science and Technology  
Department of Mathematics

## Microlocal categorical sheaves on shifted symplectic spaces

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I will describe a ladder of conjectural  $(n + 1)$ -categorical invariants associated to  $n$ -shifted symplectic derived stacks. For  $n = 0$  these generalize categories of microsheaves on smooth symplectic schemes (closely related to Fukaya categories). For  $n = -1$  and  $-2$  they should recover (categorifications of) Donaldson-Thomas invariants of Calabi-Yau three- and four-folds, respectively, thus giving a microlocal perspective on Donaldson-Thomas invariants.

Room 4502 (near Lift 25/26) Wed, May 14, 2025 04:00 PM

