

Wrapped and compact Fukaya categories of plumblings

Friday 7 February 2025 14:00 (1 hour)

Given any finite quiver Q , where each vertex corresponds to a fixed Lagrangian L_v , I will describe an associated symplectic manifold known as the plumbing of T^*L_v 's along Q . Using a local-to-global approach, I will explain how their wrapped Fukaya category can be expressed as a Ginzburg dg algebra with based loop space coefficients or a derived multiplicative preprojective algebra. In the second part of my talk, I will demonstrate that microlocal sheaves on the union of L_v 's recover the compact Fukaya category of the plumbing, generalising the Nadler-Zaslow correspondence for cotangent bundles. The first part is joint work with Sangjin Lee (arXiv:2405.10783), and the second part is ongoing work with Sangjin Lee and Wonbo Jeong.

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