Department of Mathematics University of Notre Dame

FELIX KLEIN SEMINAR

Speaker: Shuo Zhang University of Minnesota

Date: Thursday, April 18, 2024 Time: 2:00 PM Location: 125 Hayes-Healy Bldg Zoom URL: NA



Lecture Title:

A long exact sequence on the composition of Dehn twists

Abstract

Seidel conjectured that the fixed point Floer homology of the global monodromy (iterated Dehn twists) of a Lefschetz fibration can be computed from the Lagrangian Floer homologies of the vanishing cycles. In particular, there should be a long exact sequence relating them. We construct this long exact sequence by iterating Mak-Wu's construction of a Lagrangian cobordism of an associated Lagrangian correspondence. Potential applications include homological mirror symmetry for Fano manifolds and dynamics of iterated Dehn twists.