

Symplectic cohomology and duality for the wrapped Fukaya category

Sheel Ganatra, Stanford University, USA

Abstract:

Consider the wrapped Fukaya category W of a collection of exact Lagrangians in a Liouville manifold. Under a non-degeneracy condition implying the existence of enough Lagrangians, we show that natural geometric maps from the Hochschild homology of W to symplectic cohomology and from symplectic cohomology to the Hochschild cohomology of W are isomorphisms, in a manner compatible with ring and module structures. This is a consequence of a more general duality for the wrapped Fukaya category, which should be thought of as a non-compact version of a Calabi-Yau structure.