THE UNIVERSITY   **OF HONG KONG**

Geometry Seminar

Localized mirror functor constructed from a Lagrangian torus

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Abstract

Fixing a weakly unobstructed Lagrangian torus in a symplectic manifold X, we define a holomorphic function W called the localized Floer potential. We construct a canonical A_∞-functor from the Fukaya category of X to the category of matrix factorizations of W. It provides a way to interpret a Lagrangian Floer complex as a matrix factorization, directly. The technique is applied to toric Fano manifolds to transform Lagrangian branes to matrix factorizations. As a consequence, we obtain explicit generators of the category of matrix factorizations of a Laurent polynomial.

Date: October 27, 2014 (Monday)

Time: 4:00 – 5:00pm

Place: Room 210, Run Run Shaw Bldg., HKU

All are welcome