

Northern California Symplectic Geometry Seminar

BERKELEY – DAVIS – SANTA CRUZ – STANFORD

Monday, April 2nd, at **Stanford**

2:30–3:30pm, room 383N

Emmy Murphy (Stanford)

Loose Legendrian Embeddings in High Dimensional Contact Manifolds

Abstract: We define and study a class of Legendrian embeddings, which we call loose. Loose Legendrians are C^0 dense in the space of all Legendrian embeddings, in fact we show any Legendrian embedding is equal to a loose embedding outside a small neighborhood of any point. The main result we discuss is their classification up to Legendrian isotopy, which reduces their geometry to smooth topology. We will also discuss corollaries of this result: loose Legendrians have trivial pseudo-holomorphic invariants, which implies in particular they cannot be filled by an exact Lagrangian in any exact filling. We will finally present a number of open questions as time allows.

3:30–4:00pm — Tea Break, 2nd floor lounge

4:00–5:00pm, room 383N

Siu-Cheong Lau (IPMU)

Open mirror symmetry for toric manifolds

Abstract: In this talk I will explain my recent joint work with KW Chan, NC Leung and HH Tseng on the enumerative meaning of mirror maps in toric case. We derive an open analog of closed-string mirror symmetry for a class of toric manifolds, leading to a computational method of open Gromov-Witten invariants by use of mirror symmetry.

There will be a dinner at 6pm.

–D. Auroux, Y. Eliashberg, D. Fuchs, V. Ginzburg, M. Hutchings, E. Ionel, R. Montgomery, A. Weinstein