

# Northern California Symplectic Geometry Seminar

BERKELEY – DAVIS – SANTA CRUZ – STANFORD

Monday, May 5rd, 2014

ROOM 383N, STANFORD

2:30–3:30, room 383N

Roger Casals (ICMAT–CSIC Madrid, visiting Stanford)

Lower bounds on the energy of a positive loop

**Abstract:** In this talk we will discuss the existence of lower bounds for the norms of contact Hamiltonians generating positive loops of contactomorphisms. First, the existence of a lower bound for the  $C^1$ -norm will be explained. Then we will focus on overtwisted contact manifolds and show that such a lower bound also exists for the  $C^0$ -norm.

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

4:00–5:00, room 383N

Sheel Ganatra (Stanford)

Cyclic homology and  $S^1$ -equivariant symplectic cohomology

**Abstract:** In this talk we study two natural circle actions in Floer theory, one on symplectic cohomology and one on the Hochschild homology of the Fukaya category. We will show that the geometric open-closed string map between these two complexes is  $S^1$ -equivariant at a suitable chain level. In particular, there are induced maps between associated equivariant homology theories, natural with respect to Gysin sequences, which are isomorphisms whenever the non-equivariant map is.

There will be dinner at 6:00pm

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