

Northern California Symplectic Geometry Seminar

BERKELEY – DAVIS – SANTA CRUZ – STANFORD

Monday, February 6th at **Stanford**

2:30–3:30pm, room 383N

Paolo Rossi (University of Zurich)

“Non-equivariant contact homology revisited (and beyond)”

Abstract: Given any closed contact manifold, we make a different use of the correlators introduced by Bourgeois-Oancea to define non-equivariant contact homology, defining this way a new algebraic structure which, besides providing a new invariant of the contact structure, contains enough information to reconstruct the descendant theory from primaries. Time permitting we will see how this object (and the corresponding descendant reconstruction result) actually extends to full rational symplectic field theory in an elegant way which relates to the Hamiltonian system structure therein.

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

4:00–5:00pm, room 383N

Robert Lipshitz (Columbia)

“Bordered Heegaard Floer homology and the branched double cover”

Abstract: Ozsvath-Szabo constructed a spectral sequence from Khovanov homology of a knot K to the Heegaard Floer homology of the branched double cover of K . After reviewing their construction, which involves holomorphic curves, we will discuss how bordered Floer homology allows one to compute the spectral sequence and, more quickly, its limit. This is joint work with Peter Ozsvath and Dylan Thurston.

There will be a dinner at 6pm.

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