

# Northern California Symplectic Geometry Seminar

BERKELEY – DAVIS – SANTA CRUZ – STANFORD

Monday, April 14, 2014

126 BARROWS HALL, BERKELEY (not Evans Hall)

2:30–3:30

Ailsa Keating (MIT)

Lagrangian tori in four-dimensional Milnor fibres

**Abstract** The Milnor fibre of any isolated hypersurface singularity contains exact Lagrangian spheres: the vanishing cycles associated to a morsification of the singularity. Moreover, for simple singularities, it is known that the only possible exact Lagrangians are spheres. I will explain how to construct exact Lagrangian tori in the Milnor fibres of all non-simple singularities of real dimension four. Time allowing, I will use these to give examples of fibres whose Fukaya categories are not generated by vanishing cycles.

3:30–4:00

Tea Break

4:15–5:15 (Room 740)

Lev Buhovsky (Tel Aviv University)

$C^0$  symplectic geometry of smooth submanifolds

**Abstract:** I will talk about a recent study of rigidity and flexibility of smooth submanifolds under the action of symplectic homeomorphisms, formulating some new results and questions. This study is a natural continuation of previous work of Emmanuel Opshtein, and of Vincent Humilière, Rémi Leclercq, and Sobhan Seyfaddini. My talk will be based on joint work with Emmanuel Opshtein.

Barrows Hall is located on the south side of campus, near Bancroft Way and a little bit east of Telegraph Avenue. There is a parking lot on Bancroft a little bit east of Barrows, another across the street from campus at Bancroft and Dana, and another one further west on Bancroft.

Please contact [alanw@math.berkeley.edu](mailto:alanw@math.berkeley.edu) to arrange parking.

There will be a dinner at 6:00

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