Northern California Symplectic Geometry Seminar

Berkeley – Davis – Santa Cruz – Stanford

Monday, October 1st, at **Stanford**

2:30–3:30pm, room 383N

David Li-Bland (Berkeley)

"q-Poisson structures on the moduli spaces of flat connections over colored surfaces"

Abstract: Suppose that Σ is an oriented surface and $\{x_i\}$ is a set of marked points on the boundary of Σ such that every component of Σ contains a marked point. Extending a recent result of Massuyeau-Turaev, we use an intersection form to describe the q-Poisson structure on the space of G-valued representations of the fundamental groupoid, $\Pi(\Sigma, \{x_i\})$. Next we use this result to study the Poisson structure on the moduli space of flat connections over a 'colored surface' Σ. Here, a 'coloring' of Σ refers to a decomposition of Σ into domains, where each domain is 'colored' by a distinct structure group, and the domain walls are 'colored' by coisotropic relations between the structure groups.

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

4:00–5:00pm, room 383N

Andreas Floer Memorial Lecture

David Nadler (Berkeley)

"Singular support of Lagrangian branes"

Abstract: The notion of singular support is the starting point of microlocal geometry and plays a meaningful role in the study of Lagrangian branes. As an application of its content, we will describe how to sheafify the Fukaya category of a Weinstein manifold in analogy with the localization of coherent sheaves in algebraic geometry. The method provides a concrete description of the so-called infinitesimal theory and suggests diverse conjectural descriptions for the partially wrapped theory.

There will be a dinner at 6pm.

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