Northern California Symplectic Geometry Seminar

Berkeley – Davis – Santa Cruz – Stanford

Monday, February 12th, 2024

at Stanford

2:30–3:30pm, room 380W

Sheel Ganatra (University of Southern California)

Arclike Lagrangians in Liouville sectors

Abstract: Sectorial descent, established in earlier work with Pardon-Shende, gives a local-to-global formula computing the wrapped Fukaya category of a Weinstein manifold from a sectorial cover. If one has a specific fixed global Lagrangian in mind that isn't contained in a single subsector, the resulting formula is only implicit, as it begins by appealing to the generation of this object by "local" Lagrangians. In this talk I will introduce and study the class of (global) "arclike" Lagrangian submanifolds with respect to a sectorial covering, which are allowed to run through subsector boundaries but in a controlled fashion. For arclike Lagrangians, a more explicit local-to-global analysis is possible. Based on works in progress with Hanlon-Hicks-Pomerleano-Sheridan and Hanlon-Hicks-Ward.

3:30–4:00pm — Tea Break

4:00–5:00pm, room 383N

Daniel Pomerleano (UMass Boston)

The quantum connection on a monotone symplectic manifold

Abstract: The small quantum connection on a monotone symplectic manifold M is one of the simplest objects in enumerative geometry. Nevertheless, the poles of the connection have a very rich structure. After reviewing this background, I will outline a proof that, under suitable assumptions, the quantum connection of M is of unramified exponential type. This is joint work (partially in progress) with Paul Seidel.