

BOSTON UNIVERSITY GEOMETRY AND PHYSICS SEMINAR

FLOER THEORY FOR THE VARIATIONAL OPERATOR OF ISOLATED SINGULARITIES

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CCDS 365, Jan 31, 2024, 4-5pm

Tea: 3:45pm in Room 365

Abstract: The variation operator in singularity theory maps relative homology cycles to compact cycles in the Milnor fiber using the monodromy. We construct its symplectic analogue for an isolated singularity. We define a new Floer cohomology, called monodromy Lagrangian Floer cohomology, which provides categorifications of the standard theorems on the variation operator and the Seifert form. I will also explain the algorithm of finding exceptional collection of a certain curve singularity using A'Campo's divide construction. If time permits, I will discuss a relation between an A-infinity extension of this Floer cohomology and the two-associahedra.

See <http://math.bu.edu/research/geom/seminar.html> or contact Yu-Shen Lin (yslin@bu.edu) or Brian Williams (bwill22@bu.edu) for more information.