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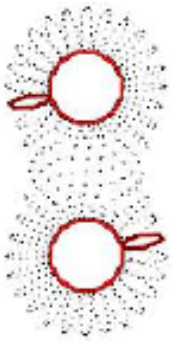

Topology Seminar at Texas State

Speaker: Ilaria Di Dedda (King's College London)

Title: A bridge between symplectic geometry and representation theory.

When: Friday, Apr. 1, 11:00 a.m.– 11:50 a.m.
Where: Online. Zoom info at bottom of page.

Abstract

Given a polynomial singularity $\mathbb{C}^2 \to \mathbb{C}$, there is a category we naturally associate to it, known as the Fukaya-Seidel category. Morally speaking, this is a category that is entirely constructed in terms of topological disks D^2 in $\mathbb{C}^2$. On the representation-theoretical side, we consider quivers (i.e. directed graphs) of finite representation type. The endomorphism algebras of indecomposable modules of such quivers are known as Auslander algebras. We prove the derived equivalence between the Fukaya-Seidel categories of a family of polynomial singularities, and the perfect derived categories of a family of Auslander algebras. In this talk, we will observe this equivalence in some key examples.

Zoom Information

Meeting URL: Click here.
Meeting ID: 922 5921 7572
Password: manifolds