Oklahoma State University

Topology Seminar

Title

Faces of the Thurston norm ball dynamically represented by multiple distinct flows

Speaker: Anna Parlak, UC Davis

Date: Sep 19, 2023
Time: 4:00 PM
Room: Online

Abstract: A pseudo-Anosov flow on a closed 3-manifold dynamically represents a face F of the Thurston norm ball if the cone on F is dual to the cone spanned by homology classes of closed orbits of the flow. Fried showed that for every fibered face of the Thurston norm ball there is a unique, up to isotopy and reparameterization, flow which dynamically represents the face. Mosher found sufficient conditions on a non-circular flow to dynamically represent a non-fibered face, but the problem of the existence and uniqueness of the flow for every non-fibered face was unresolved.

I will outline how to show that a non-fibered face can be in fact dynamically represented by multiple topologically inequivalent flows, and discuss how two distinct flows representing the same face may be related.

Contact Henry for the Zoom link