Topology, Algebraic Geometry, & Dynamics Seminar

Capturing invariance in flows and combinatorial vector fields

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Invariant sets are of central importance in the study of classical dynamical systems. They come in a variety of forms, from equilibria and periodic orbits to heteroclinic cycles and strange attractors. One important topological tool for establishing their existence is the Conley index. In this talk, I will give an introduction to Conley's theory for both flows in Euclidean space and combinatorial vector fields on simplicial complexes, indicate how it can be used to establish nontrivial invariant sets, and show connections between the classical and combinatorial setting.

Date: **Friday, March 22, 2019**
Time: **2:30-3:20 pm**
Place: **4106 Exploratory Hall**

For special accommodations, please contact Sean Lawton via email at `slawton3@gmu.edu`.