Topology, Algebraic Geometry, & Dynamics Seminar

Morse theory and a stack of broken lines

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I'll talk about some joint work with Jacob Lurie. Beginning with a basic review of Morse theory, I'll introduce a stack of broken lines, which I'll motivate by "Morse theory on a point." After talking about applications to geometry, I'll prove the main theorem: The category of factorizable sheaves on this stack is equivalent to the category of non-unital associative algebras. In other words, thinking about Morse theory on a point gives you a new model for the associative operad.

Date: Friday, April 27th, 2018

Time: **2:30-3:20 pm**

Place: 4106 Exploratory Hall

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