

1173-37-90

Jonathan Meddaugh* (jonathan_meddaugh@baylor.edu). *Shadowing and Rigidity in Dynamical Systems.*

In this talk, we discuss the properties of shadowing and uniform rigidity in dynamical systems. In particular, we show that if (X, f) is a uniformly rigid dynamical system, then (X, f) has the shadowing property if and only if X is totally disconnected. This observation leads to a discussion of topological spaces in which every dynamical system is (in an appropriate sense) rigid, which in turn gives us the tools to demonstrate that there are compact metric spaces X such that the only systems on X with shadowing are the constant systems, thus answering a long-standing question concerning the density of shadowing in the space of dynamical systems. (Received September 16, 2021)