

Abstract

In this talk, we will report some recent progress of the study on chaotic behavior of hyperbolic dynamical systems, which mainly contains two parts: (1) Existence of periodic orbits and Smale horseshoes; (2) Ergodic optimization theory. This is based on the joint works with Wen Huang, Kening Lu, Xiao Ma, Leiye Xu, Lai-sang Young, and Yiwei Zhang.