SCMS Seminar



NONDENSE ORBITS OF HOMOGENEOUS DYNAMICS

Prof. Jinpeng An Peking University

Lecture

Time: 4:00-5:00 pm., Friday, Nov. 17, 2017

Venue: Room 2201, East Main Guanghua Tower, Handan Campus

Abstract: Nondense orbits of homogeneous Homogeneous dynamics is a special kind of dynamical systems given by Lie groups. For certain important cases, the systems are ergodic and hence the points with nondense orbits form a set of measure zero. However, the behavior of nondense orbits reveals the complexity of the system and is related to problems in Diophantine approximation. In this talk, we will discuss some recent progresses of investigations in three kinds of nondense orbits: (1) bounded orbits; (2) divergent orbits; (3) orbits whose closures miss a given set. We will also discuss their relations with Diophantine problems ...