GENERIC BEHAVIOR OF SMOOTH MONOTONE SYSTEMS WITH RESPECT TO K-CONES

Speaker: Yi Wang

University of Science and Technology of China

Time: Fri, Sep. 11, 10:30-11:30

Tencent Meeting ID: 773 503 085

Abstract： In this talk, we consider a smooth flow which is “strongly monotone” with respect to a k-cone, a closed set that contains a linear subspace of dimension k and no linear subspaces of higher dimension. We will show that orbits with initial data from an open and dense subset of the phase space are either pseudo-ordered or convergent to equilibria. This covers the celebrated Hirsch's Generic Convergence Theorem in the case k=1, and yields a generic Poincare-Bendixson Theorem for the case k=2.