Title: Broken geodesics and injectivity radius

Xiaochun Rong
Rutgers university and Capital normal university

Abstract: Let M be a complete Riemannian manifold. For $p\in M$, we will discuss an estimate from below for the injectivity radius at p in terms of the local geometry. When applying it to a compact manifold, we generalize the early results (Cheeger, Burago-Gromov-Perel'man) on bounding from below the length of (almost) closed geodesics in terms of curvature, diameter and volume. This is a joint work with Nan Li.