Topology and geometry of 3-dimensional Alexandrov spaces.

Fernando Galaz-Garcia
Institute for Technology, Karlsruhe

Abstract: Alexandrov spaces (with curvature bounded below) are metric generalizations of Riemannian manifolds (with sectional curvature bounded below). In addition to being objects of intrinsic interest, these spaces play an important role in Riemannian geometry, for example, in Perelman's proof of the Poincaré Conjecture. In this talk I will discuss the topology and geometry of these spaces in dimension 3, focusing on those that have positive curvature.