Some Geometry with Lower Bounds on Ricci Curvature

Martin Citoler-Saumell

November 13, 2013

Abstract

We will review two classical rigidity results in the study of manifolds with Ricci curvature bounded below: the Cheeger-Gromoll splitting theorem and the Bishop-Gromov volume comparison. Then we will see how one can extend them in certain situations to get almost rigidity results in a Gromov-Hausdorff sense.