

1007-53-148

Chadwick Sprouse* (chad.sprouse@csun.edu), Department of Mathematics, California State University, Northridge, CA 91330-8313. *Convergence of manifolds with lower Ricci and L^1 sectional curvature bounds.*

We consider a sequence of manifolds with $\text{Ric} \geq -k^2$ converging to a Gromov-Hausdorff limit X . We use the Cheeger-Colding segment inequality to show that if the amount of sectional curvature below K approaches 0 in an L^1 sense then the X is an Alexandrov space of curvature $\geq K$. Several examples and applications are presented. (Received February 17, 2005)