

University of Notre Dame Department of Mathematics

**PDE, COMPLEX ANALYSIS AND DIFFERENTIAL
GEOMETRY SEMINAR**

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Will give a lecture entitled:

Volume Rigidity and Boundary Gluing

On

Tuesday, February 8, 2011

At

11:00 AM

In

258 Hurley Hall

Abstract

Let X and Y be compact metric spaces with the same volume. In general there is not much we can say between X and Y . However, if their curvatures are both (in the sense of Alexandrov) bounded from below and there exists a distance non-increasing onto map $f : X \rightarrow Y$, then Y has to be metrically "rigid" in terms of X . In this talk, we will study such volume rigidity phenomenon and give some applications.