1172-53-79   **Ovidiu Munteanu*** (`ovidiu.munteanu@uconn.edu`), Department of Mathematics, University of Connecticut, Storrs, CT 06269. *Comparison results for three-dimensional manifolds.*

Typical comparison results in geometry require information on Ricci curvature. In dimension three, we show that this can sometimes be relaxed to only scalar curvature. An example is a sharp upper bound for the bottom spectrum of the Laplacian on noncompact three-dimensional manifolds. (Received August 17, 2021)