Talenti's comparison theorem for Poisson equation and applications on Riemannian manifold with nonnegative Ricci curvature

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Resumo

We prove Talenti's comparison theorem for Poisson equation on complete noncompact Riemannian manifold with nonnegative Ricci curvature. Furthermore, we obtain the Faber-Krahn inequality for the first eigenvalue of Dirichlet Laplacian.

Palavras-Chave: isoperimetric inequality, Faber-Khran inequality, first eigenvalue.

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