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Etude des transformations de Riesz dans les variétés riemanniennes à courbure de Ricci minorée. (Study of Riesz transformations in Riemannian manifolds with Ricci curvature bounded from below). (French) [Zbl 0629.58018](#)

Sémin. probabilités XXI, Lect. Notes Math. 1247, 137-172 (1987).

[For the entire collection see [Zbl 0606.00022](#).]

Let E be a complete Riemannian manifold and $p(\cdot)$ a strictly positive weight. Then the operator $L = \Delta + \nabla(\log p)$ is selfadjoint on $L^2(p(x)dx)$. L^p -inequalities for this operator are proved under the assumption that the Ricci curvature is bounded from below.

Reviewer: [G.Warnecke](#)

MSC:

- [58J40](#) Pseudodifferential and Fourier integral operators on manifolds
- [58J60](#) Relations of PDEs with special manifold structures (Riemannian, Finsler, etc.)
- [58J35](#) Heat and other parabolic equation methods for PDEs on manifolds

Cited in **1** Review
Cited in **37** Documents

Keywords:

[Riemannian manifolds](#); [complete Riemannian manifold](#); [positive weight](#); [Ricci curvature](#)

Full Text: [Numdam](#) [EuDML](#)