Spaces with Bakry–Emery Ricci Curvature Bounded from Below

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Bakry–Emery Ricci curvature is a natural extension of Ricci curvature to smooth metric measure spaces, which occur naturally as measured Gromov–Hausdorff limit of Riemannian manifolds. What geometric and topological results for Ricci curvature can be extended to Bakry–Emery Ricci tensor? We will survey the recent development in this direction, including extensions of Laplacian comparison, first eigenvalue comparison, and Liouville type results.