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## **Ricci almost solitons**

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**Abstract.** We introduce a natural extension of the concept of gradient Ricci soliton: the Ricci almost soliton. We provide existence and rigidity results, we deduce a-priori curvature estimates and isolation phenomena, and we investigate some topological properties. A number of differential identities involving the relevant geometric quantities are derived. Some basic tools from the weighted manifold theory such as general weighted volume comparisons and maximum principles at infinity for diffusion operators are discussed.

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