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SOME COMPACT OBJECTS IN RICCI-BASED GRAVITY THEORIES

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After a brief review of the basic reasons that motivate exploring other theories of gravity beyond GR, I will focus on the particular framework of metric-affine theories and the predictions of some specific models. In this context we will see that different kinds of exotic compact objects whose astrophysical properties are similar to those of standard black holes may arise. Nonetheless, some of them possess novel features that may be relevant for the understanding of singularities and other conceptual issues.