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Title: Killing vector fields on compact Finsler manifolds

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In this paper, we obtain the Weitzenböck type formula for Killing vector fields on a compact Finsler manifold. By using the “Bochner technique”, we prove that Killing vector fields are parallel or vanish identically under certain curvature condition and other extra condition. In particular, we discuss Killing vector fields on some compact special Finsler manifolds. Moreover, we prove that the number of the independent Killing vector fields in a Minkowskian space is equal to the dimension of a Minkowskian space.

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