



The geodesic flow on a Riemannian supermanifold

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(Submitted on 9 Jul 2011)

We give a natural definition of geodesics on a Riemannian supermanifold and extend the usual geodesic flow defined on the cotangent bundle of the body of the supermanifold, associated to the induced Riemannian structure on the body, to a geodesic "superflow" on the cotangent bundle of the supermanifold. Integral curves of this flow turn out to be in natural bijection with geodesics on the Riemannian supermanifold. We also construct the corresponding exponential map and generalize the well-known faithful linearization of isometries to Riemannian supermanifolds.

Comments: 28 pages

Subjects: **Differential Geometry (math.DG)**; Mathematical Physics (math-ph)

MSC classes: 58A50 (Primary) 53C22, 53D25, 58C50 (Secondary)

Cite as: [arXiv:1107.1815 \[math.DG\]](#)
(or [arXiv:1107.1815v1 \[math.DG\]](#) for this version)

Submission history

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[v1] Sat, 9 Jul 2011 20:14:49 GMT (23kb)

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