

This note, that [was found here](#), as a part of [a collection](#) is written (completely with human hands) by [Rupadarshi Ray](#), was created on December 17, 2024 10:44:05 AM, was last modified on May 17, 2026 7:36:50 PM, and was exported on September 7, 2026 3:31:19 PM.

Vector fields on Riemannian manifolds

Various types of flows

- Gradient flows
- [Lagrangian flows](#)
- [Potential flows](#)
- [Lorentz flows from a 2-form](#)

Current note has 2 direct children and 4 total descendants.

- [structures based on sets](#)
 - [manifolds](#)
 - [ℝ-manifold semi-Riemannian](#)
 - [Vector fields on Riemannian manifolds](#)
 - [Lorentz flows from a 2-form](#)
 - [Kaluza-Klein geodesic flow from Lorentz force flow](#)
 - [A lagrangian with a 2-form](#)
 - [Potential flows](#)

And it has 18 siblings.

- [structures based on sets](#)
 - [manifolds](#)
 - [ℝ-manifold semi-Riemannian](#)
 - [Universal cover of semi-Riemannian manifolds](#)
 - [Curvature of a Riemannian manifold](#)
 - [Einstein manifolds](#)
 - [Exponential map from tangent bundle](#)
 - [Geodesics past conjugate points in a Riemannian manifold](#)
 - [Riemannian manifolds with ergodic geodesic flow](#)
 - [Isometries of a semi-Riemannian manifold](#)
 - [Laplacian on a Riemannian manifold](#)
 - [Parallel transport on a curve in a semi-Riemannian manifold](#)
 - [Conjugate points in a semi-Riemannian manifold](#)
 - [Quotients of Riemannian manifolds](#)
 - [Complete Riemannian manifolds](#)
 - [Riemannian connection](#)
 - [Riemannian submanifolds](#)
 - [Totally geodesic submanifolds of semi-Riemannian manifolds](#)
 - [Tangent bundle of a Riemannian manifold](#)
 - [Unit tangent bundle of a Riemannian manifold](#)
 - [Vector fields on Riemannian manifolds](#)