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Complete Riemannian manifolds without conjugate points

Every point is thus a pole

Definition. Poles of a complete Riemannian manifold

Let (M, g) be a complete Riemannian manifold. Then a point $p \in M$ is a **pole** if

$$\exp_p : T_pM \to M$$

is non-singular everywhere, or equivalently p has no conjugate points along any geodesic.

By

Let (M, g) be a connected Riemannian manifold and $p \in M$. If

$$\exp_p : T_pM \to M$$

is (well-defined and) a local diffeomorphism everywhere, then $\exp_p$ is a smooth covering map.

for each pole p,

$$\exp_p : T_pM \to M$$

is a (universal) smooth covering.

[1]

Current note has 0 direct children and 0 total descendants.

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  - manifolds
    - $\mathbb{R}$-manifold semi-Riemannian
      - Complete Riemannian manifolds
        - Complete Riemannian manifolds without conjugate points

And it has 14 siblings.

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1. Rigidity of Complete Riemannian Manifolds without Conjugate Points - main.pdf ↩