Info

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Moduli space of Riemannian metrics on a smooth manifold

Let M be a *closed* smooth manifold

$$\mathrm{Met}(M) := \left\{ g \in \mathbf{\Gamma}(\boldsymbol{Sym}^2 TM) \middle| g > 0 \right\}$$

be the set of all Riemannian metrics on M.

Then

$$\mathrm{Diff}(M) \curvearrowright \mathrm{Met}(M)$$

by pullback of the inverse.

Then

$$\mathcal{T}(M) := {}_{\mathbb{R}_{>0} \times \mathrm{Diff}(M)_\circ} \backslash^{\mathrm{Met}(M)}$$

Current note has 0 direct children and 0 total descendants.

- structures based on sets
  - manifolds
    - smooth $\mathbb{R}$-manifold
      - Moduli space of Riemannian metrics on a smooth manifold

And it has 19 siblings.

- structures based on sets
  - manifolds
    - smooth $\mathbb{R}$-manifold
      - Smooth Lie group action on a smooth manifold
      - Borel measures on a smooth manifold
      - G-bundles over smooth manifolds $G \curvearrowright P \to X$
      - Vector bundle on smooth manifolds
      - Curves in smooth manifolds
      - Density on smooth manifolds
      - Functions between smooth manifolds
      - Functions from smooth manifolds to $\mathbb{R}$
      - Flows on a smooth manifold
      - Locally $G \curvearrowright X$-manifolds
      - Smooth singular homology of a smooth manifold
      - Isomorphisms and automorphisms of smooth manifolds
      - Lagrangian flows
      - Local transformation rules
      - Moduli space of Riemannian metrics on a smooth manifold
      - Moduli space of quotients
      - Quotient manifolds
      - Submanifolds of smooth manifolds
      - Tangents on a smooth manifold