Prelude to Riemannian geomeotry

darknmt

August 1, 2017

Contents

1 Riemannian manifold

Theorem 1 (Hopf-Rinow)**.** *Given a Riemannian manifold M, the followings are equivalent*

    1. Every geodesic is well-defined at all time

    2. Closed and bounded sets are compact.

2 Exponential function

3 Jacobi fields

Emacs 25.2.1 (Org mode 9.0.5)