



The Hong Kong University of Science and Technology

Department of Mathematics

Seminar on Geometry

**On the Topology of Spaces of Nonnegatively
Curved Riemannian Metrics**

By

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Abstract

I will report on joint work with Michael Wiemeler. We study spaces and moduli spaces of Riemannian metrics with non-negative Ricci or non-negative sectional curvature on closed and open manifolds and construct, in particular, the first classes of manifolds for which these spaces have non-trivial rational homotopy, homology and cohomology groups. We also show that in every dimension at least seven (respectively, at least eight) there exist closed (respectively, open) manifolds for which the moduli space of Riemannian metrics with non-negative sectional curvature has infinitely many path components.

Date : Monday, 5 March 2018

Time: 4:30 p.m. - 5:30 p.m.

**Venue: Room 2463, Academic Building
(near Lifts 25&26), HKUST**

All are welcome!