

Moduli space of metrics of nonnegative sectional/positive Ricci curvature on homotopy real projective spaces

We show that the moduli space of metrics of nonnegative sectional curvature on a smooth closed manifold homotopy equivalent to  $\mathbb{R}P^5$  has infinitely many connected components. We also discuss corresponding results in higher dimensions for the moduli space of metrics of positive Ricci curvature. The proof uses eta invariants.