

1112-53-49

**Matthew J Gursky\*** (mgursky@nd.edu), Department of Mathematics, 262 Hurley Hall, Notre Dame, IN 46530. *A Riemannian structure on space of conformal metrics.*

I will describe a Riemannian structure on the space of conformal metrics satisfying a certain positivity condition. This metric is inspired by the Riemannian of the space of Kahler metrics, and shares many of the same properties. After defining the metric and deriving the geodesic equation, I will specialize to the case of two dimensions and prove some of the basic properties of the space. This is joint work with J. Streets (UC-Irvine). (Received July 06, 2015)