

# Student Differential Geometry Seminar

Stony Brook University

February 11, 2018

**Marlon Gomes** : “Scalar curvature, conformal geometry, and Einstein metrics.”

ABSTRACT: In this introductory talk, I will describe how scalar curvature manifests itself in Riemannian Geometry, from a variational perspective. We will study properties of extrema of the Einstein-Hilbert functional, and its restriction to conformal classes of Riemannian metrics. We will finish with a brief discussion of the Yamabe problem.