

Student Differential Geometry Seminar

Stony Brook University

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Jiasheng Teh : “The Gromov-Lawson construction of positive scalar curvature metrics, I.”

ABSTRACT: A foundational result of Gromov-Lawson and Schoen-Yau asserts that if X is a compact manifold which admits a Riemannian metric of positive scalar curvature, then any manifold obtained by performing surgeries of co-dimension at least 3 also carries a metric of positive scalar curvature. We will go through the proof by Gromov and Lawson carefully.