

WORKSHOP ON SUBMANIFOLD THEORY AND GEOMETRIC ANALYSIS

UFSCAR, SÃO CARLOS, BRAZIL, AUGUST 05 – 09, 2019

MONDAY- 10:30h - 11:20h -AUDITÓRIO DO DM

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Extrinsic surgeries for positive scalar curvature

ABSTRACT. In this joint work with B. Hanke we extend the Gromov-Lawson Theorem about surgeries for positive scalar curvature (PSC). We show that the space of compact Euclidean n -dimensional submanifolds with PSC is closed under surgeries of codimension $k \geq 3$, provided that the codimension is greater than $n - k + 1$. As an easy consequence we obtain a Whitney type theorem for PSC: Every compact non-spin n -dimensional Riemannian manifold admits an immersion with PSC in \mathbb{R}^{2n+7} .

Support:



Organizers:

