DIFFERENTIAL GEOMETRY/PDE SEMINAR

WEDNESDAY, FEBRUARY 16
PADELFORD C-36
3:45 PM

Scalar curvature deformation and general relativity

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On a compact manifold the scalar curvature map at generic metrics is a local surjection. We show that this result can be localized to compact subdomains of an arbitrary Riemannian manifold. The method of proof is extended to establish the existence of asymptotically flat, scalar-flat metrics on $\mathbb{R}^3$ which are exactly Schwarzschild outside a compact set.