

Geometric PDE



Solvability of a semilinear parabolic equation with measures as initial data

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We study the solvability of a semilinear heat equation on a Riemannian manifold with a nonnegative Radon measure as initial data. We give sharp conditions on the localin-time solvability of the problem for complete and connected manifolds with positive injectivity radius and bounded sectional curvature. This talk is based on a joint work with Hikaru Yamamoto (University of Tsukuba).