Singular solutions to parabolic equations in nondivergence form

Luis Silvestre

Abstract. For any $\alpha \in (0, 1)$, we construct an example of a solution to a parabolic equation with *measurable* coefficients in **two** space dimensions which has an isolated singularity and is not better that C^α. We prove that there exists no solution to a fully nonlinear uniformly parabolic equation, in any dimension, which has an isolated singularity where it is not C^2 while it is analytic elsewhere, and it is homogeneous in x at the time of the singularity. We build an example of a non homogeneous solution to a fully nonlinear uniformly parabolic equation with an isolated singularity, which we verify with the aid of a numerical computation.

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