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Entire solutions to a class of fully nonlinear elliptic equations

OVIDIU SAVIN

Abstract. We study nonlinear elliptic equations of the form $F(D^2u) = f(u)$ where the main assumption on F and f is that there exists a one dimensional solution which solves the equation in all the directions $\xi \in \mathbb{R}^n$. We show that entire monotone solutions u are one dimensional if their 0 level set is assumed to be Lipschitz, flat or bounded from one side by a hyperplane.

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