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# GLOBAL $L^\infty$ BOUNDS FOR A CLASS OF QUASILINEAR PARABOLIC EQUATIONS

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Abstract. In this paper we study quasi-linear parabolic equations which admit solutions which lie in a certain prescribed (possibly infinite) interval. These equations are of the form $u_t - \nabla c'(u)\nabla u = f$ together with appropriate boundary conditions, where $c : (a,b) \to \mathbb{R}$ satisfies certain conditions. We derive sufficient conditions for the solution $u$ to lie in the domain of $c$ for all times $t > 0$.

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