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SOLVABILITY OF NONLINEAR ELLIPTIC EQUATIONS WITH NONLINEAR TERMS

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We study the solvability in the whole Euclidean space of coercive quasi-linear and fully nonlinear elliptic equations modeled on $\Delta u \pm g(|\nabla u|) = f(u)$, where f and g are increasing continuous functions. We give conditions, mostly in integral form, on f and g which guarantee the availability or the absence of positive solutions of such equations in \mathbb{R}^N .

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