Asymptotics and regularity of flat solutions to fully nonlinear elliptic problems

DISSON DOS PRAZERES AND EDUARDO V. TEIXEIRA

Abstract. In this work we establish local $C^{2,\alpha}$ regularity estimates for flat solutions to non-convex fully nonlinear elliptic equations provided the coefficients and the source function are of class $C^{0,\alpha}$. For problems with merely continuous data, we prove that flat solutions are locally $C^{1,\text{Log-Lip}}$.

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