
Behavior of strong solutions to the oblique derivative problem for elliptic linear and quasilinear equations in a domain with boundary conical point

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Abstract

We study the behaviour of strong solutions to the oblique derivative problem for linear and quasilinear second-order elliptic equations in a neighborhood of a conical boundary point of an n -dimensional bounded domain. We establish an exponent of the solution's decreasing rate near the conical boundary point, i.e. we show that $|u(x)| = O(|x|^\lambda)$ with an exact exponent λ .

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