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Title: Estimates for solutions of a parameter elliptic multi-order system of differential equations

Abstract

This talk is concerned with a boundary problem defined over a bounded region in \mathbb{R}^n , and in particular is devoted to the establishment of a priori estimates for solutions of a parameter elliptic multi-order (i.e., of Douglis-Nirenberg type) system of differential equations under limited smoothness assumptions. We present results which extend those of Agranovich et al. for non-multi-order systems as well as those of Kozhevnikov and Denk-Volevich who deal with multi-order systems, but whose theories do not cover the important case of Dirichlet boundary conditions.