MULTI-LAYERS OPERATORS ON ROUGH DOMAINS AND BOUNDARY VALUE PROBLEMS

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Abstract

In this talk I will discuss Calderón-Zygmund theory results for multi-layer potential operators associated with homogeneous constant coefficient higher order systems in uniformly rectifiable domains in $\mathbb{R}^n$ and applications to Fredholm theory for boundary value problems. This is a joint work with P. Liboni (UEL-Brazil), D. Mitrea (Baylor Univ.), I. Mitrea (Temple Univ.) and M. Mitrea (Baylor Univ.).