Workshop dedicated to the memory of Professor Gabriela Kohr (2nd edition) Geometric Function Theory in Several Complex Variables and Complex Banach Spaces

Cluj-Napoca, Romania

1-3 December 2022

On the boundary behaviour of the double layer potential of second order elliptic differential operators

Massimo Lanza de Cristoforis University of Padova, Italy

Abstract

The boundary integral operator corresponding to the double layer potential on the boundary of some smooth open subset of the Euclidean space is well known to improve the regularity of the functions. If the boundary is smooth the improvement is of one unit of regularity. We present some generalizations of known results in case the regularity of the set is C^2 or lower in the frame of Schauder spaces.