

THE FALL OF THE DOUBLING CONDITION IN CALDERÓN-ZYGMUND THEORY

JOAN VERDERA

Abstract

The most important results of standard Calderón-Zygmund Theory have recently been extended to very general non-homogeneous contexts. In this survey paper we describe these extensions and their striking applications to removability problems for bounded analytic functions. We also discuss some of the techniques that allow us to dispense with the doubling condition in dealing with singular integrals. Special attention is paid to the Cauchy Integral.

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