1010-35-56 Katharine A Ott* (kott@virginia.edu), PO Box 400137, University of Virginia, Charlottesville, VA 22904. Transmission Boundary Value Problems in Non-Smooth Domains. Preliminary report.

We address the issue of the sharpness of the well-posedness results for L^p transmission boundary value problems in nonsmooth domains, for the Laplacian and the system of elastostatics. Our analysis, done in the general framework of the Calderón-Zygmund theory, relies on Mellin transform techniques. (Received August 16, 2005)