John L Lewis, Lexington, KY 40506, and Andrew L Vogel\* (alvogel@syr.edu), Syracuse, NY 13244. Overdetermined boundary value problems, uniform rectifiability and symmetry. Preliminary report.

We consider positive solutions to elliptic partial differential equations (of p Laplacian type) satisfying some overdetermined boundary conditions (expressed in terms of an associated measure) in a bounded domain D. These conditions yield the local uniform rectifiability of  $\partial D$  and also the expected symmetry theorem. (Received December 20, 2005)