



6th Symposium on Analysis and PDEs

Purdue University, June 1–4, 2015

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June 1, 9:00–9:50am

Higher Order Boundary Harnack Inequalities and Applications to Free Boundary Problems.

We present some higher order Boundary Harnack inequalities and provide applications to obtain higher regularity in obstacle-type free boundary problems. In particular, we describe the boundary behavior of harmonic functions in so-called “slit domains” and develop the appropriate Schauder theory. This is a joint work with O. Savin.