1020-31-58

John L Lewis* (john@ms.uky.edu), Mathematics Department, 7th Floor Patterson Office Tower, University of Kentucky, Lexington, KY 40506, and Kaj Nystrom (kaj.nystrom@math.umu.se), Umea, Sweden. On a boundary Harnack inequality for p harmonic functions.

In this talk we outline the proof of a boundary Harnack inequality for the ratio of two positive p harmonic functions vanishing on a portion of a Lipschitz domain in Euclidean n space when 1 . Applications of this boundary Harnack inequality will also be discussed. (Received August 09, 2006)