1073-35-126 **Evans M Harrell\*** (harrell@math.gatech.edu), School of Mathematics, Georgia Institute of Technology, Atlanta, GA 30332-0160. *Hardy inequalities and the spectra of Laplace and p-Laplace operators.* 

I will discuss a result of Boggio that implies Hardy-type inequalities, and will use the latter to derive some bounds on spectral gaps and estimates on eigenfunctions for PDEs containing p-Laplacians. Some of this work was joint with Fleckinger and de Thelin. (Received July 29, 2011)