## 1145-35-1144Laura Dawn Croyle\* (lcroyle@bw.edu), Baldwin Wallace University, Department of<br/>Mathematics, 275 Eastland Rd, Berea, OH 44017, and Russell Brown. Estimates for the $L^p$ <br/>Mixed Boundary Value Problem in $C^{1,1}$ Domains. Preliminary report.

We look at the mixed boundary value problem for elliptic operators in a bounded  $C^{1,1}$  domain. The boundary of the domain  $\Omega$  is decomposed into disjoint parts, D and N, with Dirichlet and Neumann data respectively. Expanding on work done by Ott and Brown, we find a larger range of values of p,  $1 , for which the <math>L^p$  mixed problem has a unique solution with the non-tangential maximal function of the gradient in  $L^p(\partial\Omega)$ . (Received September 19, 2018)