1116-VB-797　　　　　**Laura Dawn Croyle*** (`lauradcroyle@gmail.com`), 4161 Victoria Way, Apt 18105, Lexington, KY 40515. *L^p solutions to the mixed boundary value problem in C^2 domains.*

We look at the mixed boundary value problem for the Laplacian in a bounded $C^2(\mathbf{R}^n)$ domain, given by

$$
\begin{cases}
-\triangle u &=& 0 & \text{in } \Omega \\
u &=& 0 & \text{on } D \\
\frac{\partial u}{\partial \nu} &=& g & \text{on } N
\end{cases}
\tag{MP}
$$

Here, we have a Lipschitz dissection of the boundary given by disjoint sets, N and D, with Neumann and Dirichlet data respectively. Expanding on work done by Ott and Brown, we find a larger range of values of p, $1 < p < \frac{n}{n-1}$, for which the L^p mixed problem has a unique solution with the non-tangential maximal function of the gradient in $L^p(\partial\Omega)$. (Received September 13, 2015)