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Katharine A Ott* (katharine.ott@uky.edu), 715 Patterson Office Tower, Department of Mathematics, Lexington, KY 40506, and **Justin L Taylor** and **Russell M Brown**. *The mixed problem for the Laplacian in bounded Lipschitz domains.*

We consider the mixed boundary value problem for the Laplacian in bounded Lipschitz domains Ω in \mathbb{R}^n , $n \geq 2$. The boundary is decomposed as $\partial\Omega = D \cup N$, with D and N disjoint. We specify Dirichlet data on D and Neumann data on N . The boundary between D and N is an important feature in the mixed problem. In this talk I will discuss existence and uniqueness of solutions to the mixed problem when the boundary between D and N is given by a Lipschitz graph and when the boundary between D and N satisfies a more general set of geometric conditions. (Received July 27, 2010)