1093-35-309 Katharine Ott* (katharine.ott@uky.edu). The mixed problem for the Lamé and linear Stokes systems in two dimensions.

Consider a bounded Lipschitz domain $\Omega \subset \mathbb{R}^2$ with boundary $\partial\Omega$ decomposed as $\partial\Omega = D \cup N$ with $D \cap N = \emptyset$. We specify conditions on the domain, N and D, as well as on the boundary data, so that the mixed problem for the Lamé system of elasticity or the linear Stokes system has a unique solution whose non-tangential maximal function of the gradient belongs to the space L^p of the boundary. This is joint work with Russell Brown and Seick Kim. (Received August 19, 2013)