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Matthew Wright* (wrightm@math.missouri.edu), 5502 Prairie Rose Ct., Columbia, MO 65202,
and **Marius Mitrea**. *Transmission Problems for Higher Order Operators*. Preliminary report.

This talk will focus on the transmission problem for the bi-Laplacian, concerned with finding two functions which are biharmonic in the interior and exterior of a Lipschitz domain Ω respectively which interact in a precise prescribed fashion at the boundary. While having a meaningful physical interpretation of its own, the transmission problem can also be considered as an intermediary link between the Neumann and Regularity problems, and as such, analyzing the transmission problem leads to significant results regarding the spectra of the boundary integral operators associated with these problems. (Received February 06, 2008)