1037-45-209   **Marius Mitrea*** (`marius@math.missouri.edu`), Department of Mathematics, University of Missouri, Columbia, MO 65211. *Boundary value problems for the Stokes system.* Preliminary report.

The goal of this talk, based on joint work with Matthew Wright, is to describe recently obtained optimal well-posedness results for boundary-value problems for the Stokes system in Lipschitz domains with arbitrary topology, in all space dimensions and for all major types of boundary conditions: Dirichlet, Regularity, Neumann, and transmission. In addition, the corresponding inhomogeneous problems are also discussed. (Received February 02, 2008)