

# On the Stokes operator with first order boundary conditions on unbounded domains

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On unbounded domains  $\Omega \subseteq \mathbb{R}^d$ , which are uniformly  $C^{2,1}$ , we study the Stokes operator with Hodge, Navier, and Robin boundary conditions. We present results on the boundedness of Hörmander and  $H^\infty$  functional calculi in  $L^q$ -spaces. Moreover, we take a look on optimal regularity estimates of type  $L^p$ - $L^q$  for inhomogeneous boundary data.