

1015-35-306

**Tunde Jakab\*** ([jakabt@gmail.com](mailto:jakabt@gmail.com)), Mathematics Department, 202 Mathematical Sciences Building, University of Missouri - Columbia, Columbia, MO 65211-4100, and **Marius Mitrea** ([marius@math.missouri.edu](mailto:marius@math.missouri.edu)), Mathematics Department, 202 Mathematical Sciences Building, University of Missouri - Columbia, Columbia, MO 65211-4100. *Sharp estimates for the heat operator in Lipschitz cylinders.*

We adapt the method of boundary layer potentials to the Poisson problem for the heat operator in a bounded Lipschitz cylinder, with Dirichlet and Neumann boundary conditions, taking the lateral datum from an anisotropic Besov space. This extends the important work of D. Jerison and C. Kenig who dealt with the case of the Laplacian. (Received February 07, 2006)