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**Akif Ibragimov\*** ([akif.ibragimov@ttu.edu](mailto:akif.ibragimov@ttu.edu)), Department of Mathematics and Statistics, Texas Tech University, Lubbock, TX 79409, **Alexander Grigoryan**, Fakultät für Mathematik, Universität, Bielefeld, Germany, and **Alexander Nazarov**, St.-Petersburg Branch of Steklov Math. Instit, St.-Petersburg, Russia. *Mixed boundary value problem in unbounded domain for elliptic equation of second order.*

In this paper we will investigate regularity problem at infinity for solutions of elliptic equation of second order with respect to mixed Dirichlet and Neumann boundary conditions. We will show that under some assumption on Dirichlet and Neumann parts of the boundary solution is regular at infinity. First this type of test was obtained in breakthrough work by Vladimir Mazya for elliptic equations in divergent form in "An analogue of Wiener's criterion for the Zaremba problem in a cylindrical domain." *Funktsional. Anal. i Prilozhen.* 16 (1982), No. 4. In the current research both divergent and non-divergent equations will be considered. (Received August 12, 2016)