

Texas Tech University. Joint Analysis and Applied Math Seminars.

Mixed boundary value problems for degenerate elliptic equations at infinity

DAT CAO

Texas Tech University

Wednesday, November 08, 2017

Room: MATH 112. Time: 4:00pm.

ABSTRACT. We study qualitative properties of the solutions of the Zaremba type problem in unbounded domains in non-divergent form. We obtain Phragmén-Lindelöf type principle on the growth and decay of the solutions in the domain which is narrowing at infinity with respect to designated direction x_1 . Equation is considered to be elliptic in the finite part of the domain but may be degenerate at infinity. Main results formulated in terms of the so called s -capacity of the Dirichlet portion of the boundary, with Neumann boundary satisfying certain “admissibility” condition. This is a joint work with Akif Ibragimov (Texas Tech University) and Alexander I. Nazarov (St. Petersburg Department of Steklov Institute).