

Nonlinear second-order elliptic and parabolic equations arise in the theory of differential equations and in numerous applications. A wide class of such equations, the class of quasilinear equations, has been studied by many mathematicians almost as thoroughly as the class of linear equations. These studies have resulted in many papers and books such as those by Ladyzhenskaya and Ural'tseva [3], Ladyzhenskaya, Solonnikov, and Ural'tseva [4], Ivanov [2] and Gilbarg and Trudinger [1].

References

- [1] David Gilbarg and Neil S. Trudinger, *Elliptic partial differential equations of second order*, reprint of the 2nd ed. berlin heidelberg new york 1983. corr. 3rd printing 1998 ed., Springer, 1 2001.
- [2] A. V. Ivanov, *Quasilinear degenerate and nonuniformly elliptic and parabolic equations of second order*, Leningrad : Nauka, 1982.
- [3] O. A Ladyzhenskaya and N. N Ural'tseva, *Linear and quasilinear equations of elliptic type*, 1973.
- [4] O.A. Ladyzhenskaya, V.A. Solonnikov, and N.N. Ural'tseva, *Linear and quasilinear parabolic equations [in russian]*, (1967).