1107-90-341 **Olga Brezhneva*** (`brezhnoa@miamioh.edu`), Department of Mathematics, Miami University, Oxford, OH 45056, and **Alexey Tret'yakov**, University of Podlasie in Siedlce, Siedlce, Poland.
Optimality conditions for irregular nonlinear programming problems. Preliminary report.

In this talk, we present necessary and sufficient optimality conditions for some classes of irregular nonlinear programming problems with inequality constraints. First, we analyze cases when optimality conditions of the Karush-Kuhn-Tucker-type (KKT) hold for irregular problems. We prove new geometric necessary conditions and the KKT-type optimality conditions under some new regularity assumptions. Then we continue with consideration of irregular problems for which the KKT-type of conditions do not hold and propose some new necessary and sufficient optimality conditions. (Received January 19, 2015)