## 1025-49-273

Olga A. Brezhneva\* (brezhnoa@muohio.edu), 123 Bachelor Hall, Department of Mathematics and Statistics, Miami University, Oxford, OH 45056, and Alexey A. Tret'yakov. Optimality Conditions for Nonregular Constrained Optimization Problems. Preliminary report.

In this talk, we consider smooth nonregular optimization problems. We present an overview of the existing necessary and sufficient optimality conditions as well as discuss recent developments for such problems. The presented results reduce to the classical optimality conditions for regular cases but give new and nontrivial conditions for the nonregular cases. (Received January 23, 2007)