

1067-49-1382

Akhtar A Khan* (aaksma@rit.edu), School of Mathematical Sciences, Rochester Institute of Technology, 85 Lomb Memorial Drive, Rochester, NY 14623, and **D E Ward**, Department of Mathematics and Statistics, Miami University, Oxford, OH 45056-1641. *Toward Second-Order Sensitivity Analysis in Set-Valued Optimization.*

This talk will focus on the use of second-order contingent derivatives and second order contingent epiderivatives to give a unified treatment of second order sensitivity analysis for set-valued and vector optimization problems. The second-order results recover a number of known results from first order sensitivity analysis as particular cases. Some new higher-order optimality conditions in set-valued optimization will also be discussed. (Received September 20, 2010)