

1067-49-1132 **Elena Constantin*** (constane@pitt.edu), Department of Mathematics, University of Pittsburgh at Johnstown, 450 Schoolhouse Road, Johnstown, PA 15904. *Second Order Necessary Conditions for Problems with Locally Lipschitz Data via Tangential Directions.*

The goal of this talk is to provide some second order necessary conditions of optimality for a constrained mathematical programming problem with locally Lipschitz data with the aid of Clarke's generalized derivative and Páles and Zeidan's second order upper directional derivative. There are given necessary conditions in terms of the quasi-interior directions and also necessary conditions in terms of the first and second order contingent directions to the constrained set at the extremum point. (Received September 19, 2010)