

1056-49-1335

Yen-Nhi Nguyen-thi* (nhi@math.wayne.edu), 1125 Faculty/Administration Building, 656 W Kirby, Detroit, MI 48202, **Boris Mordukhovich** (boris@math.wayne.edu), 1237 Faculty/Administration Building, 656 W Kirby, Detroit, MI 48202, and **Nam Mau Nguyen** (nguyenmn@utpa.edu), MAGC 3.808, 1201 West University Drive, Edinburg, TX 78539.

Coderivatives in Parametric Optimization in Asplund Spaces.

In this talk, we first develop some calculus rules for second-order partial subdifferentials of extended real-valued functions in the framework of Asplund spaces. We then apply these rules in the study of a family of parameterized optimization problems in which both cost function and constraint function are nonsmooth extended real-valued, and conduct local sensitivity analysis for the stationary point and stationary point-multiplier multifunctions. (Received September 21, 2009)