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Mau Nam Nguyen*, Fariborz Maseeh Department of Math & Stats, Neuberger Hall, Room 334, 725 SW Harrison St., Portland, OR 97201. *On Lipschitz Properties of Nonsmooth Functions and Set-Valued Mappings via Generalized Differentiation and Applications.*

In this talk, we revisit the Mordukhovich's subdifferential criterion for Lipschitz continuity of nonsmooth functions and coderivative criterion for the Aubin/Lipschitz-like property of set-valued mappings in finite dimensions. The criteria are useful and beautiful results in modern variational analysis showing the state of the art of the field. As an application, we establish necessary and sufficient conditions for Lipschitz continuity of the minimal time function and the scalarization function, that play an important role in many aspects of nonsmooth analysis and optimization.

(This talk is based on joint work with G. Lafferriere) (Received September 15, 2013)