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Hoang Dinh Nguyen* (ndhoang@wayne.edu), Department of Mathematics, Wayne State University, Detroit, MI 48202, and **Boris Mordukhovich** and **Mau Nam Nguyen**. *Calculus for Clarke Subgradients and Convexified Coderivatives in Reflexive Banach Spaces*. Preliminary report.

Using recent developments and techniques in variational analysis, we establish new results on generalized differential calculus for convex-valued normal/coderivative/subgradient constructions for sets, set-valued mappings, and nonsmooth functions in reflexive Banach spaces. The results obtained particularly extend known calculus rules for Clarke generalized gradients in both finite-dimensional and infinite-dimensional settings. (Received January 11, 2007)