## 1043-49-99 Bingwu Wang\* (bwang@emunix.emich.edu), 515 Pray-Harrold Building, Eastern Michigan University, Ypsilanti, MI 48197. Normal Compactness and Lipschitz Mappings.

Normal compactness is an important property for the calculus rules of generalized differentiation in infinite-dimensional variational analysis, especially for the limiting constructions including Mordukhovich subdifferentials, coderivatives, and normal cones. It closely relates to the Lipschitz properties of mappings/functions. In this talk, we will explore the evolution of this concept in modern variational analysis, as well as its recent development including different kind of extensions. New examples of functions that hold such properties will be provided. Calculus rules and applications of extensions of this property will also be discussed. (Received August 21, 2008)