

1112-49-454

Bingwu Wang* (bwang@emich.edu), 515 Pray-Harrold Building, Eastern Michigan University, Ypsilanti, MI. *On the Weak Differentiability in Variational Analysis.*

The talk involves the weak differentiability of functions between Banach spaces, which corresponds to the differentiability of the scalarizations of the functions. We will review basic results of this notion and explore its applications to generalized differentiation in variational analysis. In this way we demonstrate that this notion and its variant, in contrast to the usual differentiability, are more suitable for Fréchet and limiting/Mordukhovich constructions. (Received August 10, 2015)