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**Bao Quang TRUONG\*** (tqbao78@yahoo.com), 1401 Presque Isle Avenue, Marquette, MI MI 49855, and **Christiane Tammer** (christiane.tammer@mathematik.uni-halle.de). *Lagrange necessary conditions for Pareto minimizers in Asplund spaces and applications.*

In this talk, new necessary conditions for Pareto minimal points to sets and Pareto minimizers for constrained multiobjective optimization problems are established without both the sequentially normal compactness property and the asymptotical compactness condition usually imposed on closed and convex ordering cones. Our approach is based on a version of the separation theorem for nonconvex sets and the subdifferentials of vector-valued and set-valued mappings. Furthermore, applications in mathematical finance and approximation theory are discussed. (Received September 09, 2010)