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Joseph Newhall* (joseph.newhall@zu.ac.ae) and **Robert K. Goodrich**. *On the Density of Henig Efficient Points in Locally Convex Topological Vector Spaces.*

This paper presents a generalization of the Arrow, Barankin and Blackwell theorem to locally convex Hausdorff topological vector spaces. Our main result relaxes the requirement that the objective set A is compact; we show asymptotic compactness is sufficient provided the asymptotic cone of A can be separated from the ordering cone, C , by a closed, convex cone. We introduce this notion as the Cone Separation Property and show that in normed spaces it is equivalent to $A_\infty \cap C = \{0\}$. In this way, our main result generalizes a theorem of A. Göpfert, C. Tammer and C. Zălinescu to locally convex spaces. We also generalize a well known result about expansion cones to locally convex spaces. (Received September 15, 2013)