

**Sehie Park, Jong Sook Bae**

***On zeros and fixed points of multifunctions with non-compact convex domains***

Comment.Math.Univ.Carolinae 34,2 (1993) 257-264.

**Abstract:** Using our own generalization [7] of J.C. Bellenger's theorem [1] on the existence of maximizable u.s.c. quasiconcave functions on convex spaces, we obtain extended versions of the existence theorem of H. Ben-El-Mechaiekh [2] on zeros for multifunctions with non-compact domains, the coincidence theorem of S.H. Kum [5] for upper hemicontinuous multifunctions, and the Ky Fan type fixed point theorems due to E. Tarafdar [13].

**Keywords:** convex space,  $c$ -compact set, real Hausdorff topological vector space (t.v.s.), linear operator, locally convex, fixed point, coincidence, zero, upper hemicontinuous (u.h.c.) multifunction

**AMS Subject Classification:** Primary 47H10