WELL-POSEDNESS FOR UNCERTAIN VECTOR OPTIMIZATION PROBLEMS

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Abstract

In this talk, we consider vector optimization problems under uncertain data. First, we introduce concepts of efficient solutions to robust counterparts of such problems based on the idea of set order relations. We next propose concepts of well-posedness for the reference problems. By the virtue of a generalized nonlinear scalarization functional and image space analysis, we investigate interrelations between the well-posedness of the reference problems and that of appropriate scalarized problems. Sufficient conditions are also given for such types of well-posedness.

Keywords: uncertain vector optimization problem, nonlinear scalarization functional, well-posedness.