

## On proper efficiency in multiobjective semi-infinite optimization

Jan-J. Rückmann  
Department of Informatics  
University of Bergen  
PO Box 7803  
5020 Bergen, Norway

Email: Jan-Joachim.Ruckmann@ii.uib.no

### Abstract

We consider multiobjective semi-infinite optimization problems which are defined by finitely many objective functions and infinitely many inequality constraints in a finite-dimensional space. We discuss constraint qualifications as well as necessary and sufficient conditions for locally weakly efficient solutions. Furthermore, we generalize two concepts of properly efficient solutions to the semi-infinite setting and present corresponding optimality conditions.

This is a joint work together with Francisco Guerra Vázquez from the Universidad de las Américas, Puebla, México.