



UNIVERSIDADE FEDERAL DO PARANÁ - UFPR  
CENTRO POLITÉCNICO  
DEPARTAMENTO DE MATEMÁTICA

# Seminários Contínuos do Programa de Pós-Graduação em Matemática

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## Multiobjective programming problems

ELIZABETH WEGNER KARAS

ABSTRACT. In this talk we present a method solving multiobjective optimization problems that combines achievement and improvement functions. The algorithm exploits the specific structure of the achievement function from a nonsmooth optimization perspective based on bundle methods that it is specially tailored for efficiently building the Pareto front. This is done by parsing attainable points for the objective functions, in a manner that allows for warm starts of the successive nonsmooth problems solved by the bundle algorithm. The methodology is illustrated with some examples that show the interest of the approach.