Research School for Operations
Management and Logistics

Multi-criteria decision making in settings with uncertainty

Sebastian Rojas Gonzalez – KU Leuven

The first half of the PhD has been dedicated to the development of optimization algorithms for stochastic multiobjective problems, when these are analytically intractable and we rely on, often expensive, simulation estimates. In this context, metamodels are used to compute fast but accurate mathematical approximations of the underlying simulation models during the optimization process. The second half of the PhD is not only dedicated to enhance the methods proposed so far, but also to the application of these techniques in real-life problems.