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A Bayesian approach to find Pareto optima in multiobjective programming problems using Sequential Monte Carlo algorithms

Mike G. Tsionas

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Highlights

- A new approach to multicriteria decision making problems.
- A Metropolis-Hastings and a Sequential Monte Carlo (SMC) to trace out the entire Pareto frontier and / or find the global optimum of the problem.
- Multicriteria protfolio decision making problem proposed in Xidonas et al. (2010)
- A test problem proposed by Qu et al. (2013).
- An off-the-shelf technique to solve arbitrary multicriteria decision making problems routinely and efficiently.