

Bock's Multiple-Shooting and Global Optimization

B. Mohammadi

Univ. Montpellier, `bijan.mohammadi@univ-montp2.fr`

Deterministic or stochastic minimization algorithms are discrete forms of first or second order Cauchy problems. We formulate global optimization as a boundary value problem for these systems. A controllability result suggests this model is suitable for global search. We propose a low-complexity recursive algorithm and multiple-shooting for its solution.