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Book of Abstracts

Edited by

Ömür Uğur

of Markov Chain Monte Carlo algorithms. Standardizing the simulated variables over Normalised Difference Vegetation Index (NDVI), impact of drought related variables on wheat yield is studied. We used the Fixed Effect Spatio-Temporal model to predict the wheat yield for the 11 stations. Based on these estimations, we constructed a one year insurance policy for year 2006. In order to compare the basis risk performance of given models, we calculated the premium and indemnity payments for the selected farms.

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DELEGATED PORTFOLIO MANAGEMENT WITH AMBIGUITY AVERSION

Fabretti, Annalisa; Herzel, Stefano; Pinar, Mustafa Ç.

The purpose of this paper is to consider the problem of an investor, who, aware of the effect of estimating errors on expected returns, adopts a robust optimization approach. Since the investor does not have direct access to the market and delegates the investment strategy to a portfolio manager, we consider a problem of delegated portfolio management with ambiguity aversion. More specifically, we are interested in analyzing the effect of ambiguity aversion on delegated portfolio choices and managerial fees. To this end, we set a simple model where a portfolio manager (not averse to ambiguity) is hired by an investor (averse to ambiguity) who pays him a fee on the final wealth produced by the selected portfolio strategy. To study the effect of the ambiguity on the fee, we assume that the manager decides to accept the job by comparing its utility to that of a similar employment where there are no restrictions derived by aversion to ambiguity. The increase on the fee paid by the investor to the manager is therefore a measure of the cost of ambiguity, or a premium for the ambiguity aversion.

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STOPPING RULES EFFECT ON A DERIVATIVE-FREE FILTER MULTISTART ALGORITHM FOR MULTILocal PROGRAMMING

Fernandes, Florbela P.; Costa, M. Fernanda P.; Fernandes, Edite M.G.P.

Multilocal programming aims to identify all the local solutions of constrained optimization problems. The purpose of this paper is to analyze the effect of stopping rules on the performance of a particular multistart method, which relies on a derivative-free local search procedure to converge to a solution, when solving multilocal optimization problems. The method herein presented implements the

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approximate descent direction method combined with a filter methodology to handle the constraints by forcing the local search towards the feasible region. Two stopping rules are tested on five classical multimodal problems.

**VARIANTS OF BiCGSAFE METHOD USING SHADOW THREE-TERM
RECURRENCE**

Fujino, Seiji; Sekimoto, Takashi

We propose variants of BiCGSafe method for solving a linear system of equations appear in the field of scientific computing.

This iterative method comes from reconstruction of polynomials, and utilizes shadow three-term recurrence for the purpose of safety convergence. Through numerical experiments, we verify effectiveness of the proposed variants of BiCGSafe method.

**TWO-DIMENSIONAL CAVITATING FLOW PAST AN OBLIQUE PLATE IN A
CHANNEL**

Gasmi, Abdelkader

This work is concerned with the numerical solution for a nonlinear flow problem of an incompressible inviscid fluid. The fluid is assumed to be inviscid and the flow is irrotational. The mathematical problem is characterized by a nonlinear boundary condition along the free streamline of unknown equation. the shape of the free surface and the flow of the fluid are determined for various values of the Weber number α . The obtained results include and extend the work done by Gasmi & Mekias.

**ON CONCOMITANTS OF ORDER STATISTICS FOR BIVARIATE
PSEUDO-GOMPERTZ DISTRIBUTION**

Gebizlioğlu, Ömer L.; Yörübulut, Serap

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