DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE UNIVERSITY OF SOUTHERN DENMARK, ODENSE

COMPUTER SCIENCE COLLOQUIUM

Biofuels for energy production and stochastic optimization

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IMADA's Seminar Room

Abstract:

I consider some of the modeling problems encountered when changing large central cogeneration power plants from burning coal to burning biomass. In particular it becomes necessary to handle uncertainty because the storage for biomass is far more expensive than for coal, making it required to model that power plants can run out of fuel. To gain insight into how to handle this we consider some of the ideas presented at a PhD Winter School on stochastic optimization in Oppdal, Norway in March 2011. Key points in this is decomposing the problem and the introduction of measures to compare solutions between deterministic and stochastic solutions.

Host: