APPLIED MATHEMATICS COLLOQUIUM

Some Recent Work in Derivative-Free Optimization: An Introduction

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Abstract:
Due to, amongst other reasons, the growing sophistication and efficiency of computer simulations, there are an increasing number of instances where one wishes to perform optimization of complex systems where at least some of the derivative information of the resulting objective functions and constraints is not available. Ignoring simulated annealing, genetic and other similar algorithms, there are two fundamental approaches to optimization without derivatives, namely pattern search and functional models. This talk is intended to give an introduction to the latter in a trust region context, including, time permitting, some very recent results.

Monday September 27th 2010
4:30 PM
Building 2, Room 105
Refreshments are available in Building 2, Room 290
(Math Common Room) between 3:30 – 4:30 PM

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