



Im Rahmen des Kolloquiums des
Graduiertenkollegs Algorithmic Optimization
findet am

Montag, 27. Juni 2016
16 h c.t.
Hörsaal 10

folgender Vortrag statt:

THE GRAND FOUR.

Affine Invariant Newton Methods for Nonlinear Problems

Prof. Dr. Dr. h.c. Peter Deuffhard
Université Pierre et Marie Curie (UPMC)

Abstract

Four affine invariance classes (affine covariance, affine contravariance, affine conjugacy, affine similarity) for nonlinear problems lead to four different classes of adaptive Newton algorithms.

Affine covariance applies to boundary value problems for differential equations (both ODEs and PDEs), affine contravariance applies to Fredholm integral equations, affine conjugacy leads to convex optimization, and, last but not least, affine similarity leads to pseudo-continuation methods for equilibrium problems in time dependent ODEs or PDEs. For the latter invariance class rather recent results are presented.

Gastgeber:

Prof. Dr. Volker Schulz

Kolloquiums Kaffee ab 15.45 im Raum E 10