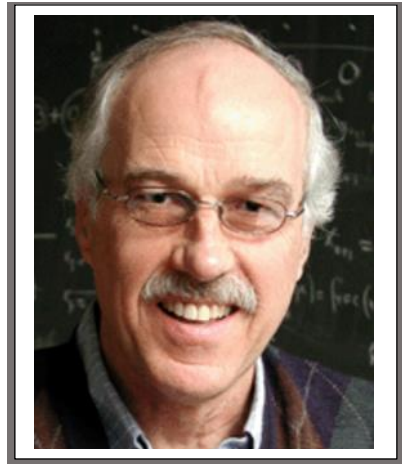


Optimization for the Masses - NEOS, Benchmarks and (un)expected Progress

**Dr. Hans
Mittelmann**
Professor
ASU School of
Mathematical and
Statistical Sciences



Abstract

This talk will largely address service for the public, from students, to teachers, researchers, and practitioners. Optimization is so ubiquitous and pervasive that interest in it goes beyond traditional groups. About twenty years ago a webpage providing information about optimization with emphasis on available sources including especially software was started. Out of this grew an extensive comparison of optimization software which is known as the »public benchmarks« in contrast to the comparisons by the various developers, both commercial and non-commercial. This publication and its widespread recognition lead to substantial improvements which may not have happened to the same extent otherwise. Many who have to solve an optimization problem cannot easily implement the necessary program themselves, for them an interactive service was established which is the second substantial service component that will be highlighted and demonstrated.

Biography

Hans Mittelmann received his M.S. degree in Mathematics/Physics from the University of Mainz/Germany in 1971 and his PhD from the Technical University in Darmstadt/Germany in 1973. In 1976 he finished the habilitation for mathematics at this university and in 1977 accepted a position as associate professor with tenure at the University of Dortmund/Germany. At that time his research was in the numerical solution of partial differential equations and the finite element method. Dr. Mittelmann spent a Sabbatical in 1981 at the Computer Science Department of Stanford University and in 1982 accepted a full professorship at Arizona State University. He held visiting positions at several universities including the universities of Erlangen, Freiburg, Heidelberg, and Leipzig in Germany, the University of Jyvaeskylae in Finland, the King Fahd University of Petroleum and Minerals in Saudi Arabia and the Tokyo Institute of Technology. Recently his research is in computational optimization and applications to various areas in the sciences and engineering.

Personal webpage: <http://plato.asu.edu/>

Websites maintained

<http://plato.asu.edu/guide.html>

<http://plato.asu.edu/bench.html>

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