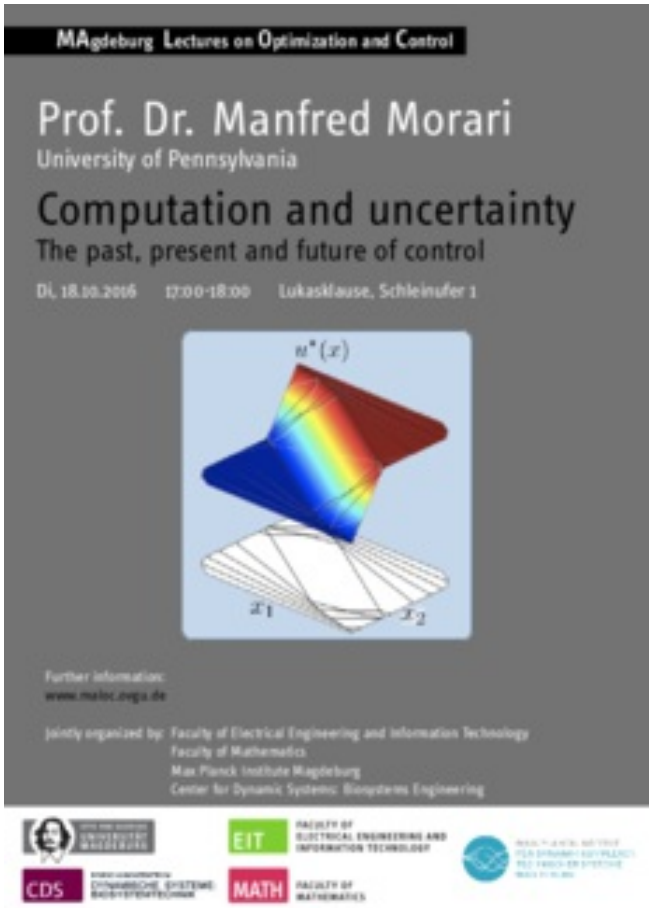
OTTO VON GUERICKE UNIVERSITÄT MAGDEBURG

MAGDEBURG LECTURES ON OPTIMIZATION AND CONTROL

Manfred Morari



Computation and uncertainty — The past, present and future of control

› Prof. Dr. Manfred Morari (https://www.seas.upenn.edu/directory/profile.php?ID=213) Distinguished Faculty Fellow
University of Pennsylvania

Time & Place
The presentation on October 18, 2016 will be given in the Lukasklause › (Schleinufer 1, 39104 Magdeburg) (http://ifatwww.et.uni-magdeburg.de/syst/maloc/seminars/Standort%20Lukas%20Klause.pdf) and starts at 5.00 p.m. (Historischer Raum).

Abstract
Reflecting on our work over the last 40 years I found that it was dominated by two themes: computation and uncertainty. I will describe how the rapidly increasing computational resources have affected our approaches to deal with uncertainty in feedback control. The talk will be illustrated by examples from process control and other application areas like automotive and power systems.

Bio
Manfred Morari was head of the Department of Information Technology and Electrical Engineering at ETH Zurich from 2009 to 2012 and head of the Automatic Control Laboratory from 1994 to 2008. Before that he was the McCollum-Corcoran Professor of Chemical Engineering and Executive Officer for Control and Dynamical Systems at the California Institute of Technology. From 1977 to 1983 he was on the faculty of the University of Wisconsin. He obtained the diploma from ETH Zurich and the Ph.D. from the University of Minnesota, both in chemical engineering. His interests are in constrained

and robust control. Morari's research is internationally recognized. The analysis techniques and software developed in his group are used in universities and industry throughout the world. He has received numerous awards, including the Eckman Award, Ragazzini Award and Bellman Control Heritage Award from the American Automatic Control Council; the Colburn Award, Professional Progress Award and CAST Division Award from the American Institute of Chemical Engineers; the Control Systems Technical Field Award and the Bode Lecture Prize from IEEE. He is a Fellow of IEEE, AIChE and IFAC. In 1993 he was elected to the U.S. National Academy of Engineering and to the UK Royal Academy of Engineering in 2015. He served on the technical advisory boards of several major corporations.