



Symposium

Nonlinear Compensation of Loudspeakers

<http://isp.imm.dtu.dk/nonlincomp>

Thursday December 2, 2004, 13:00-17:00, room 053, building 321,
Informatics and Mathematical Modelling, Technical University of Denmark

Registration to Ulla Nørhave, un@imm.dtu.dk before November 25, 2004. Registration is free of charge.

The development in nonlinear signal processing algorithms and hardware platforms provides an interesting challenge of compensation of nonlinearities in loudspeakers. Successful electronic compensation will enable high sound quality in small transducers even at high sound pressure levels. The applications are multitude ranging from hearings aids, mobile telephones and head sets to home theater and PA equipment.

The symposium focuses on application of digital signal processing for optimization of transducer performance. Further a panel will discuss future expectations and the challenges of applying the techniques in real-world devices.

Program

13:00-14:00: **Active Compensation of Transducer Nonlinearities**

Dr. Wolfgang Klippel, Klippel GmbH, Dresden, Germany, <http://www.klippel.de>

14:00-14:20: Coffee break

14:20-15:20: **Deliberate Nonlinear Design and Control of Loudspeaker**

Dr. Andrew Bright, Nokia A/S, <http://www.nokia.com>

15:20-15:30: Break

15:30-16:15: **Learning Based Signal Processing for Nonlinear Compensation**

Associate Professors Jan Larsen and Ole Winther,
IMM, DTU, <http://www.imm.dtu.dk>

16:15-16:20: Break

16:20-17:00: **Panel discussion: Challenges in commercial compensation systems**

Dr. Wolfgang Klippel, Klippel GmbH

Dr. Andrew Bright, Nokia A/S

Assoc. Prof. Finn Agerkvist, Ørsted.DTU

Dr. Søren Riis, Oticon A/S

M.Sc. Jan Abildgaard Pedersen, AM:3D A/S

M.Sc. Thomas Kyhn, Bang & Olufsen A/S

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