

Institut für Physik

7. April 2010

Im Rahmen des Physikalischen Kolloquiums findet die hochschulöffentliche

Antrittsvorlesung

von

Prof. Dr. Simon Doclo

Institut für Physik
Universität Oldenburg

am Montag, 12. April 2010, 16.15 Uhr in W2 1-148

statt.

„Signal processing for acoustical applications“

In many speech communication applications, such as hands-free mobile telephony, hearing aids and voice-controlled systems, the recorded microphone signals are corrupted by acoustic background noise and reverberation, leading to poor speech intelligibility and substantially degrading the performance of speech coding and recognition systems. In this seminar we will discuss some recent speech enhancement algorithms for adverse acoustic environments, focusing on robust adaptive beamforming and binaural signal processing strategies for hearing aids and active noise control algorithms for headsets. Audio examples will demonstrate the performance of the presented speech enhancement techniques. In the last part of the presentation, we will give some perspective on future exciting research topics in this field, such as distributed and collaborative processing for acoustic sensor networks.

Der Direktor