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Nota di contenuto	Directivity Based Reference for the Generalized Multichannel Wiener Filter -- Reference for the Binaural Multichannel Wiener Filter -- Wind Noise Reduction for a Closely Spaced Microphone Array -- Background Noise Simulation based on MIMO Equalization.
Sommario/riassunto	Simon Grimm examines new multi-microphone signal processing strategies that aim to achieve noise reduction and dereverberation. Therefore, narrow-band signal enhancement approaches are combined with broad-band processing in terms of directivity based beamforming. Previously introduced formulations of the multichannel Wiener filter rely on the second order statistics of the speech and noise signals. The author analyses how additional knowledge about the location of a speaker as well as the microphone arrangement can be used to achieve further noise reduction and dereverberation. The Content Directivity Based Reference for the Generalized Multichannel Wiener Filter Reference for the Binaural Multichannel Wiener Filter Wind Noise

Reduction for a Closely Spaced Microphone Array Background Noise Simulation based on MIMO Equalization The Target Groups Lecturers and Students in the field of Speech Signal Processing Practitioners of Speech Signal Processing and Noise Reduction The Author Simon Grimm was a research assistant at the Institute of System Dynamics at the HTWG Konstanz, Germany, from October 2014 to March 2018. During his research period, he was working in the area of speech signal processing for multichannel microphone arrangements. He finished his Ph.D. in June 2018. Currently he is employed as a signal processing engineer at a German audio equipment manufacturer.
