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Autore	Benesty Jacob
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	References; 5 Multichannel Speech Enhancement in the Time Domain; 5.1 Signal Model and Problem Formulation; 5.2 Linear Filtering with a Rectangular Matrix; 5.3 Performance Measures; 5.3.1 Noise Reduction; 5.3.2 Speech Distortion; 5.3.3 MSE Criterion; 5.4 Optimal Rectangular Filtering Matrices; 5.4.1 Maximum SNR; 5.4.2 Wiener 5.4.3 MVDR5.4.4 Tradeoff; 5.4.5 LCMV; References; 6 Multichannel Speech Enhancement in the Frequency Domain; 6.1 Signal Model and Problem Formulation; 6.2 Linear Array Model; 6.3 Performance Measures; 6.3.1 Noise Reduction; 6.3.2 Speech Distortion; 6.3.3 MSE Criterion; 6.4 Optimal Filters; 6.4.1 Maximum SNR; 6.4.2 Wiener; 6.4.3 MVDR; 6.4.4 Tradeoff; 6.4.5 LCMV; References; 7 A Bayesian Approach to the Speech Subspace Estimation; 7.1 Signal Model and Problem Formulation; 7.2 Estimation Based on the Minimum Mean-Square Distance; 7.3 A Closed-Form Solution Based on the Bingham Posterior References8 Evaluation of the Time-Domain Speech Enhancement Filters; 8.1 Evaluation of Single-Channel Filters; 8.1.1 Rank-Deficient Speech Correlation Matrix; 8.1.2 Full-Rank Speech Correlation Matrix; 8.2 Evaluation of Multichannel Filters: References: Index
Sommario/riassunto	Speech enhancement is a classical problem in signal processing, yet still largely unsolved. Two of the conventional approaches for solving this problem are linear filtering, like the classical Wiener filter, and subspace methods. These approaches have traditionally been treated as different classes of methods and have been introduced in somewhat different contexts. Linear filtering methods originate in stochastic processes, while subspace methods have largely been based on developments in numerical linear algebra and matrix approximation theory. This book bridges the gap between the