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Autore	Van Trees Harry L
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Note generali	Pt. 4 of Detection, estimation and modulation theory.
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Nota di contenuto	Contents; Preface; 1 Introduction; 1.1 Array Processing; 1.2 Applications; 1.2.1 Radar; 1.2.2 Radio Astronomy; 1.2.3 Sonar; 1.2.4 Communications; 1.2.5 Direction Finding; 1.2.6 Seismology; 1.2.7 Tomography; 1.2.8 Array Processing Literature; 1.3 Organization of the Book; 1.4 Interactive Study; 2 Arrays and Spatial Filters; 2.1 Introduction; 2.2 Frequency-wavenumber Response and Beam Patterns; 2.3 Uniform Linear Arrays; 2.4 Uniformly Weighted Linear Arrays; 2.4.1 Beam Pattern Parameters; 2.5 Array Steering; 2.6 Array Performance Measures; 2.6.1 Directivity 2.6.2 Array Gain vs. Spatially White Noise ($A_{sub(w)}$)2.6.3 Sensitivity and the Tolerance Factor; 2.6.4 Summary; 2.7 Linear Apertures; 2.7.1 Frequency-wavenumber Response; 2.7.2 Aperture Sampling; 2.8 Non-isotropic Element Patterns; 2.9 Summary; 2.10 Problems; 3 Synthesis of Linear Arrays and Apertures; 3.1 Spectral Weighting; 3.2 Array Polynomials and the z-Transform; 3.2.1 z-Transform; 3.2.2 Real Array

Weights; 3.2.3 Properties of the Beam Pattern Near a Zero; 3.3 Pattern Sampling in Wavenumber Space; 3.3.1 Continuous Aperture; 3.3.2 Linear Arrays; 3.3.3 Discrete Fourier Transform
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5.2.1 Frequency-domain Snapshot Models

Sommario/riassunto

Well-known authority, Dr. Van Trees updates array signal processing for today's technology. This is the most up-to-date and thorough treatment of the subject available. Written in the same accessible style as Van Tree's earlier classics, this completely new work covers all modern applications of array signal processing, from biomedicine to wireless communications.
