

Angle of Arrival Estimation Using Maximum Likelihood Method

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Abstract : Multiple Input Multiple Output (MIMO) radar has received increasing attention in recent years. MIMO radar has many advantages over conventional phased array radar such as target detection, resolution enhancement, and interference suppression. In this paper, the results are presented from a simulation study of MIMO Uniformly-Spaced Linear Array (ULA) antennas. The performance is investigated under varied parameters, including varied array size, Pseudo Random (PN) sequence length, number of snapshots, and Signal to Noise Ratio (SNR). The results of MIMO are compared to a traditional array antenna.

Keywords : MIMO radar, phased array antenna, target detection, radar signal processing

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