

An L-Shaped Array With Nonorthogonal Axes—Its Cramér–Rao Bound for Direction Finding

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Abstract:

If a nominally L-shaped sensor-array's two legs are not exactly perpendicular, its azimuth-polar direction-of-arrival estimation would be degraded. This paper quantifies this degradation via a deterministic Cramér-Rao bound analysis of the direction-finding error variance.

Keywords

Legged locomotion, Sensor arrays, Estimation, Manifolds, Covariance matrices

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