

Null Steering In Adaptive Arrays By Controlling The Elevations Of the Antenna Array Elements

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Antennas and Propagation Society International Symposium, 1994. AP-S. Digest; Publication Date: 20-24 Jun 1994; Vol: 2, On page(s): 1244-1247 vol.2; ISBN: 0-7803-2009-3

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Summary

Adaptive antenna arrays for radar and communication application have been the subject of considerable interest. The main reason for this interest is that the interference signals can be suppressed by steering nulls in the directions of interference and unwanted signals, while keeping the main beam pointing towards the desired signal. A number of adaptive null steering techniques that use phase weighting have been studied previously. The present paper describes another method for null steering using vertical perturbation of the array elements. The results obtained using the new method are found to be superior to others. The new technique is applicable when the desired signal is close to the broadside direction

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