



DOA-DETECTION GUIDED NLMS ADAPTIVE ARRAY (TueAmOR12)

* Author(s) :

John Homer

(University of Queensland, Australia)

Peter Kootsookos

(United Technologies Research Center, United States)

Vigneswaran Selvaraju

(Hatch Associates, Australia)

* Abstract :

In various adaptive array applications, the directions of arrival (DOAs) of the desired user signal are sparsely separated. As such, the desired beam-pattern has a sparse structure. We propose an NLMS based adaptive algorithm which exploits this sparse DOA structure and provides significantly improved convergence and tracking capabilities.