

Description:

MATLAB codes that can generate simulation results and figures shown in the paper.

Size:

The total size of the file is 1.43 MB in RAR format.

Player Information:

To run the codes one needs **MATLAB** and **CVX** optimization toolbox that can be downloaded, for example, here <http://cvxr.com/cvx/>

Packing List: List of M-Files

Beampattern_Design.m & Beampattern_Design_SDD.m	MATLAB subroutine for designing the beampatterns.
main_code.m	MATLAB code for performing optimization over Stiefel manifold.
check.m	MATLAB code for applying the unitary rotation to the beamspace matrix of our proposed method.
Performance_Comparison.m	MATLAB code for comparing the methods tested in the journal paper by way of RMSE.
Resolution.m	MATLAB code for comparing the methods tested in the journal paper by way of probability of resolving two closely located sources.
Beampattern_Plot.m	MATLAB code for generating the beampatterns.

NOTE: main_code.m and associated functions was written by the group of Dr. Visa Koivunen of Aalto University, and merely used here.

main_code.m will generate the unitary matrix.

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