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Bio:

Xiaoqiang Hua is a lecturer of the National University of Defense Technology. He received the PhD degrees in information and communication engineering from National University of Defense Technology, Changsha, China, in 2018. His research interests lie in the areas of information geometry, statistical signal processing, radar target detection, underwater acoustic signal processing.

Speech Title: MIG Detectors: Basic Theory and Applications

Speech Abstract: Matrix information geometry is the study of intrinsic properties in the space of Riemannian manifold composed of positive-definite matrices. Matrix information geometry has been successfully applied to radar signal processing, image processing, computer vision, and other inter-disciplinaries. This report gives a brief introduction of the theory of matrix information geometry, and summaries some applications of signal detection in homogeneous and nonhomogeneous clutter. The further work on MIG detectors is also pointed out.