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<p>Zhou XU received the B.S. and M.S. degrees in electrical and electronic engineering from the Naval Aeronautical University, Yantai, China, in 2012 and 2014, respectively, and the Ph. D. degree in information and communication engineering from the National University of Defense Technology, Changsha, China, in 2022. He is currently a lecturer with the College of Electronic Engineering, National University of Defense Technology. His research interests include radar waveform design and anti-jamming technology. He has published more than 20 papers in renowned journals such as IEEE TSP, IEEE TAES, and IEEE JSTAR, as the first author. He has presided over the Youth Program of the National Natural Science Foundation of China and the China Postdoctoral Science Foundation Project, and won a third-prize award for military scientific and technological progress.</p>		
<b>Speech Title (English):</b>		
Robust radar transceiver design for linear detection against target fluctuations		
<b>Speech Abstract</b>		
<p>Radar target detection has long been an important topic in the field of radar signal processing. From the perspective of radar detectors, although the likelihood ratio test detector can achieve optimal detection performance, it suffers from high implementation complexity, and is hardly to analyze theoretically. In contrast, linear detectors are structurally simple, with an inevitable trade-off in terms of detection performance. From the target perspective, scattering fluctuations caused by target moving also leads to instability in detection performance. To address these issues, this talk introduces the design of radar waveforms and filters for robust target detection within the linear detector framework. By jointly optimizing the radar transmitted waveform and linear filter, the detection performance and robustness of linear detectors are enhanced.</p>		