

Meeting Minutes IEEE SPS Synthetic Aperture Technical Working Group

02 February 2023

1. Group members in attendance were Kumar Vijay Mishra, Peter Vouras, Ahmet Elbir, Arpan Chattopadhyay, Naveen K. D. Venkategowda, Raghu G. Raj, Shobha Sundar Ram, Theresa Scarnati, Wei Liu, Yu Rong, Jim Fienup, Samuel Pinilla.
2. The Chair Kumar Vijay Mishra presented an overview of the scope of TWG, briefed the group about the activities undertaken during the previous year.
3. Former TWG Chair Peter Vouras remarked about the history of the group.
4. Peter Vouras mentioned plans to propose a special session at the 2023 Asilomar Conference on “Phase Migration and Image Focusing in Phaseless Synthetic Apertures” and invited group members to contribute to the session.
5. Peter Vouras presented the status of three special issue (SI) proposals he is leading:
 - IEEE J-STSP on “Phaseless Synthetic Apertures”. Status: Submission ready.
 - IEEE Trans. Antennas and Propagation on “Synthetic Aperture Antennas”. Status: Under revision.
 - IEEE SP Magazine on “Signal Processing for Synthetic Apertures”. Status: Under preparation. Editorial panel finalized.
6. Ahmet Elbir and Shobha Sundar Ram presented the status of IEEE Trans. Vehicular Technology SI proposal they are leading on “Synthetic Apertures on Automated Vehicles”. Members asked the leads to consider non-radar synthetic apertures (e.g., lidar) while revising the proposal.
7. Ahmet Elbir presented the status of three special issue (SI) proposals he is leading:
 - IEEE J-STSP on “Near-Field Signal Processing”. Status: Approved.
 - IEEE Wireless Comms Mag. On “Near-Field Communications” Status: Submission Ready
 - IEEE Wireless Comms Mag. On “Synthetic Apertures Communications” Status: Under preparation
8. Raghu G. Raj presented the status of IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing SI proposal he is leading on “Multistatic and Multiview Synthetic Apertures for Geoscience and Remote Sensing”. Members suggested including sonar, radiometry, and radar meteorology topics to the call and clarify the “multiview” aspect.
9. Arpan Chattopadhyay presented the status of IEEE J-STSP SI proposal he is leading on “Electromagnetic Signal Theory”. Members discussed making the proposal different from near-field and ESIT/EIT special issue calls in J-STSP/J-SAC. There was also discussion on adding biological/human tissue channels to the call.
10. Kumar Vijay Mishra mentioned interest from Naveen K. D. Venkategowda and Peter Vouras to lead a possible IEEE Wireless Comms Magazine SI on "AI/ML for Synthetic Apertures".
11. Kumar Vijay Mishra mentioned other topics for which the TWG is looking for members who can lead the SI:
 - IEEE J-STSP SI on full duplex apertures
 - IEEE Communications Standards Magazine SI on synthetic apertures (may approach David Griffiths as the potential lead)
 - IEEE TQE SI on quantum synthetic apertures (may approach Peter Vouras

and Boulat Bash as the potential leads)

12. Kumar Vijay Mishra mentioned the 2023 ICASSP that the TWG is organizing this year in Rhodes, Greece: Workshop: <https://sagroups.ieee.org/sps-sasc/icassp-2023-workshop/>
13. Our next meeting will be on ***Thursday, March 16 at 1:00 pm ET.***

