## Meeting Minutes IEEE SPS Synthetic Aperture Technical Working Group 07 June 2023

- 1. Group members in attendance were
  - Virtually: Kumar Vijay Mishra, Arpan Chattopadhyay, Shobha Sundar Ram, and Arundhati Misra-Ray.
  - In-person at ICASSP, Rhodes, Greece: Peter Vouras, Alle-Jan van der Veen, Wei Liu.
  - Ahmet Elbir virtually represented SA-TWG at the SPCOM TC meeting that was held at the same time.
- 2. Dr. Arundhati Misra-Ray from the Indian Space Research Organization (ISRO) was the guest speaker and presented an overview of her current research: Observations and processing of data from SENTINEL satellite, RISAT satellite, and Chandrayan lunar orbiter for various applications. Follow-up questions on the presentation were asked by Peter and Vijay. There was discussion on using some of the presented datasets for SASC standards activities.
- 3. TWG members presented updates on the special issues (SIs) related to synthetic apertures (SAs) they are leading:
  - Peter
    - Under preparation: WC-M (with Arpan and Naveen on AI/ML for SAs.
  - Arpan
    - J-STSP SI on ESIT is currently being reviewed by other GEs
  - Ahmet (updated on his behalf by Vijay)
    - J-STARS SI on ISAC: call published.
  - Yu (updated on his behalf by Vijay)
    - J-BHI SI: Accepted.
  - Igor (updated on his behalf by Vijay)
    - Exploring IP and SIAM SIs phase retrieval. Vijay suggested including Peter in the IP SI guest editors for quantum Rydberg sensors work.
- 4. Update on annual conference on SP for SAs (Kumar Vijay Mishra & Peter Vouras): Peter, Aly, and Vijay are working with Paritosh (NIST) and Kate (NIST) on holding the conference at the NIST campus in Boulder, Colorado next year in June. The conference will be supported by NIST. The SPS will technically support the conference. The conference will be of 2-days duration with an additional third day reserved for SASC business meetings and NIST lab tour.
- 5. Update on proposal for T-CI Special Section on Synthetic Apertures (Kumar Vijay Mishra & Peter Vouras): The proposal has been submitted to the T-CI and we are waiting to hear back from the EiC. The proposed editorial panel has Vijay and Peter

- as lead AEs. There are also 14 area-specific AEs, including TWG members Ahmet, Raghu, Shobha, and Aly.
- 6. Two subcommittees were announced by the chair:
  - Webinar subcommittee: Peter (Chair), Arpan, Theresa, Yu
  - Special issue subcommittee: Ahmet (Chair), Shobha, Raghu, Igor
- 7. SA-TWG Webinar subcommittee report: Peter and Arpan mentioned that the subcommittee is in the process of selecting suitable speakers. Vijay will reach out to some colleagues in NASA for a possible first speaker.
- 8. Feedback from 2023 RadarConf (Kumar Vijay Mishra): Vijay and Shobha attended the RadarConf in San Antonio in May 2023. Vijay provided some feedback from the conference about increasing AESS participation in the SA-TWG/SASC activities. Vijay mentioned that the standards subcommittee of the AESS Radar Systems Panel (RSP) is organizing a M-AES special issue on radar standards. The SA-TWG/SASC could possibly submit two papers to this special issue.
- 9. Brief updates from the SASC chair on SA standards activities (Peter Vouras): New PARs initiated on ISAC, ultrasound, and MRI standards. The study group on multichannel SAR has now graduated to a working group.
- 10. Proposal and planning for 2024 ICASSP SA workshop (Peter Vouras & Kumar Vijay Mishra): All TWG members are invited to contribute to the planning and proposal for the next ICASSP SA workshop. Previous TPC members will roll over to the next TPC unless they wish to opt out. Arpan expressed interest to join the next TPC.
- 11. Special session proposals for 2024 ICASSP and other conferences (Kumar Vijay Mishra): The SPCOM TC has invited special session (SS) proposals from the SATWG for the next year's ICASSP. Arpan and Peter expressed interest to submit SS proposals.
- 12. Our next meeting will be on *Thursday*, *July 13 at 1:00 pm ET*.