2024 SPCOM TC Annual Meeting

ICASSP 2024
April 24, 2024

Waheed U. Bajwa
SPCOM TC Chair

Agenda

1. State of the TC (Chair and Vice Chair)

2. SPAWC 2023 Presentation (Presenter: Geert Leus)

3. SPAWC 2024 Presentation (Slides ONLY)

4. SPAWC 2025 Presentation (Presenter: Geoffrey Li)

5. SPAWC 2026 Presentation (Presenters: Itsik Bergel and Nir Shlezinger)

6. Updates from the ISAC and SA Technical Working Groups (TWGs)

7. SPCOM TC 2023 Review and Discussion on the Future of TC (Chair and Vice Chair)

State of the TC

TC Membership (30 Total: 28 regular members; 1 vice chair; 1 chair)

Past Members

- Lutz Lampe and Meixia Tao completed their respective second terms in 2023

- Hugo Tullberg completed his first term in 2023 and decided not to be nominated for a second term

Re-elected Members

- Yao-Win Hong, Antti Tolli, and Xin Wang were re-elected for their respective second terms (2024 – 2026)

New Members

- George Alexandropoulos, Amir Leshem, Angela Sara Cacciapuoti, and Anne Savard were elected for their respective first terms (2024 – 2026)

Past Chair

- Osvaldo Simeone completed his one year as the TC Past Chair (Vice Chair: 2020; Chair: 2021 – 2022; Past Chair; 2023)

Vice Chair

- Urbashi Mitra was elected as the Vice Chair of the TC (2024); she will transition to Chair (2025 – 2026) and then to Past Chair (2027); new Vice Chair will be elected in 2025.

TC Membership

2025 Member Elections

- There will be a total of six vacant positions for the term starting in 2025

Three other categories of TC members

- **Advisory members (max: 10; currently: 8):** Tim Davidson, Georgios Giannakis, Erik G. Larsson, Geert Leus, Björn Ottersten, Nikos Sidiropoulos, Ananthram Swami, and Wei Yu

- **Associate members (max: 15; currently: 7):** Arjun Anand, Apple, Ravikumar Balakrishnan, Intel Labs, Federico Boccardi, AWS, Jakob Hoydis, NVIDIA, Timothy O'Shea, DeepSig, Onur Sahin, Apple, and Yue Wang, Samsung

- **Affiliate members and student affiliate members**

Demographics of the TC Membership

30 Technical Committee Members, including Chair and Past Chair

- 8 women and 22 men
- 28 academia and 2 non-academia

Regional Breakdown

- North America: 7
- South America: 1
- Europe: 11
- Middle East: 3
- Asia / Pacific: 8

ICASSP Statistics

ICASSP 2014 (Florence)	205 accepted out of 387 submitted + 5 SPL papers	11.6% of ICASSP
ICASSP 2015 (Brisbane)	75 accepted out of 153 submitted + 14 SPL papers	6.8% of ICASSP
ICASSP 2016 (Shanghai)	116 accepted out of 240 submitted + 9 SPL papers	9.0% of ICASSP
ICASSP 2017 (New Orleans)	72 accepted out of 146 submitted + 4 SPL papers	5.8% of ICASSP
ICASSP 2018 (Calgary)	80 accepted out of 171 submitted + 4 SPL papers	6.2% of ICASSP
ICASSP 2019 (Brighton)	71 accepted out of 153 submitted + 4 SPL papers	4.1% of ICASSP
ICASSP 2020 (Barcelona)	67 accepted out of 141 submitted + 5 SPL papers	3.6% of ICASSP
ICASSP 2021 (Toronto)	50 accepted out of 104 submitted + 2 SPL papers	2.9% of ICASSP
ICASSP 2022 (Singapore)	41 accepted out of 92 submitted + 2 SPL papers	2.4% of ICASSP
ICASSP 2023 (Rhodes)	72 accepted out of 154 submitted + TBN	TBN
ICASSP 2024 (Seoul)	91 accepted / 170 submitted + 4 (journal) + 2 (OJSP)	2.9% of ICASSP

SPAWC Statistics

SPAWC 2012 (Cesme, Turkey)	119 accepted out of 171 submitted	124 attendees
SPAWC 2013 (Darmstadt, Germany)	158 accepted out of 237 submitted	184 attendees
SPAWC 2014 (Toronto, Canada)	102 accepted out of 121 submitted	132 attendees
SPAWC 2015 (Stockholm, Sweden)	140 accepted out of 207 submitted	178 attendees
SPAWC 2016 (Edinburgh, UK)	173 accepted out of 260 submitted	210 attendees
SPAWC 2017 (Sapporo, Japan)	178 accepted out of 256 submitted	268 attendees
SPAWC 2018 (Kalamata, Greece)	152 accepted out of 281 submitted	250 attendees
SPAWC 2019 (Cannes, France)	107 accepted out of 245 submitted	237 attendees
SPAWC 2020 (Atlanta, USA)	139 accepted out of 189 submitted	308 attendees
SPAWC 2021 (Lucca, Italy)	124 accepted out of 164 submitted (84 invited)	152 attendees
SPAWC 2022 (Oulu, Finland)	99 accepted out of 163 submitted (67 invited)	165 attendees
SPAWC 2023 (Shanghai, China)	128 accepted out of 163 submitted	166 attendees

Distinguished Lecturer Nomination

- Urbashi Mitra (successful)

Concern: No nomination for the Distinguished Industry Speaker

Awards: 3 TC nominations – 1 successful

- Best Paper Award (Deep Learning Enabled Semantic Communication Systems)
  - Same paper was nominated for the Young Author Best Paper Award, so informally 2 successful
- The IEEE SPS Technical Achievement Award nomination did not succeed at the SPS level

Concern: Two award nominations could not be made due to the lack of 50% membership endorsement

- IEEE SPS Signal Processing Magazine Best Paper Award and IEEE SPS Sustained Impact Paper Award

Committee Assignments for 2024

Paper Awards Subcommittee

- Angela Sara Cacciapuoti
- David Morales
- Urbashi Mitra (*ex-officio*)
- **Veronica Belmega (Chair)**
- Xin Wang

Nominations and Elections Subcommittee

- An Liu
- **Jun Zhang (Chair)**
- Shang-Ho (Lawrence) Tsai
- Waheed Bajwa (*ex-officio*)
- Yao-Win (Peter) Hong

Society Awards Subcommittee

- Amir Leshem
- Ana Perez-Neira
- **Rodrigo de Lamare (Chair)**
- Urbashi Mitra (*ex-officio*)

New Initiatives Subcommittee

- Elvin Isufi
- Kumar Vijay Mishra
- **Nuria Gonzalez Prelic (Chair)**
- Tsung-Hui Chang

Committee Assignments for 2024

Special Issues and Special Sessions Subcommittee

- Christos Thrampoulidis
- **Domenico Ciuonzo (Chair)**
- George Alexandropoulos
- Nir Shlezinger
- Ya-Feng Liu

Industry and Government Liaison Subcommittee

- Ahmed Alkhateeb
- Antti Tolli
- Deniz Gunduz
- **Mark Eisen (Chair)**

Webpage Subcommittee

- Roula Nassif (Chair)
- Waheed Bajwa (ex-officio)
- Yonina Eldar

Bylaws and Procedures Subcommittee

- Anne Savard
- Junil Choi
- **Waheed Bajwa (Chair)**

Upcoming Schedule for 2024

- Nominations and voting for Distinguished Lecturer & Distinguished Industry Speaker (SPS Deadline: May 31)

- SPAWC 2024 reviewing (May to June)

- Nominations and voting for all non-paper SPS awards (June to August)

- Scan reviews for Best Paper and Young Author Best Paper awards (May to June)

- Nominations, award-level reviews, and voting for all paper awards (June to August)

- ICASSP 2025 reviewing (September to November)

- Membership nomination and elections (October to November)

SPAWC 2023 Presentation

SPAWC 2024 Slides ONLY

SPAWC 2025 Presentation

SPAWC 2026 Presentation

Updates from Technical Working Groups (TWGs)

Integrated Sensing and Communications TWG
Synthetic Aperture TWG

SPCOM TC 2023 Review and Discussion on the Future of TC

SPCOM TC 2023 Review

SPS requires that each Technical Committee undergo a review at least once every five years, with the frequency of subsequent reviews determined by the TC Review Committee and the Vice President-Technical Directions at the conclusion of each review process.

- **Previous SPCOM TC Review:** 2020

Review Committee

- Min Wu   President-Elect, TC Review Committee Chair
- Yonina Eldar   TC Review Committee Member
- Xiaoli Ma   TC Review Committee Member (Lead for the SPCOM Review)
- Gaurav Sharma   TC Review Committee Member
- Namrata Vaswani   TC Review Committee Member

Outcome: Successful review with constructive feedback, but no major areas of concern

Feedback from the TC Review Committee

- Acknowledged the well-prepared and active involvement of the SPCOM TC in SPS, noting their significant contributions to signal processing.

- Highlighted recent improvements including a new focus on machine learning, more industrial members, balanced workloads, and active award nominations.

- Recommended exploring emerging areas like 6G, IoT, fiber-wireless, and quantum communications to enhance TC activities and attract diverse members.

- Urged enhanced collaborations with other TCs and IEEE/ACM societies to develop new workshops and special sessions, and to engage more industry partners.

- Suggested using webinars to increase the TC's visibility, disseminate new research, and attract new members.

- Proposed revising the reviewing model for ICASSP/ICIP to involve more junior volunteers and give senior members more time for journals.

- Suggested considering the replacement of full workshop papers with short abstracts to streamline reviewing processes.

Bringing AI into SPAWC: A Proposal for Changing the Name of SPAWC

SPAWC, with its current name, is probably losing some papers to ComSoc, which has launched the "IEEE International Conference on Machine Learning in Communications and Networking." This is likely to siphon off many papers from SPAWC without rebranding.

Following are the key points regarding the proposed name change and its implications:

- Received formal approval from VP-Technical Directions Board to rename SPAWC to "Signal Processing and AI for Wireless Communications," retaining the original acronym. <u>A formal vote on the new name is required following discussion.</u>

- SPS staff informed of potential changes or delays with Indexing Partners of IEEE in posting papers due to the discontinuation of the ISSN. But the staff also assured that IEEE will maintain the conference series in Xplore despite the name change, though external links to the historical series may be disrupted. Highlighted that while the Impact Factor is typically less critical for conferences, the name or ISSN change could reset it.

Summary: Biggest consequence is the potential resetting of the Impact Factor (IF), which may affect conference selection criteria in some Asian countries.

- Advised to consult within the TC to determine if the IF is a critical factor for conference participation in these regions.

Other Discussion Items

- Merging of SPCOM TC and SAM EDICS at the ICASSP level under the topic of "Signal Processing for Sensing and Communication"

- Soft suggestion from VP-Technical Directions Board about co-locating SPAWC and SAM workshops during even years (odd years, SAM TC has CAMSAP)

- Other discussion items