

IEEE SPS SPCOM-TC Meeting at ICASSP 2018

Calgary, Canada

April 18, 2018

7:00am-8:30am

Agenda

- Call to order; Welcome from the chair
- Approval of the agenda
- Chair's report
- Report from SPAWC 2017 (Wei Yu)
- Update from SPAWC 2018 (Ubli Mitra, Athina Petropulu, Waheed Bajwa)
- Update from SPAWC 2019 (Laura Cottatellucci, David Gesbert)
- Proposal for SPAWC 2020
 - Georgia Tech. (Zhengdao Wang, Xiaoli Ma, and Geoffrey Ye Li)
- Discussion of Award Nomination Process (Joakim Jaldén)

Approval of Agenda (vote)

Chair's Report - Membership

- The TC held a Vice-Chair election in October 2017.
 - Three candidates stood for election: Joakim Jaldén, Gerald Matz, and Chandra Murthy.
 - The result: [Joakim Jaldén](#) was elected as the Vice-Chair for 2018.
- The following seven members had their terms ending in 2017:
 - Erik Larsson (Past Chair)
 - Yindi Jing, Wing-Kin Ma, Urbashi Mitra, Michael Rabbat, Alejandro Ribeiro, Rui Zhang.
- Two are eligible for re-election:
 - [Yindi Jing, Wing-Kin Ma](#). Both were elected for another 3-year term (2018-2020)
- The following five new members were elected for a 3-year term (2018-2020):
 - [Elisabeth de Carvalho, Meixia Tao, Lutz Lampe, Ali Tajer, Dirk Slock](#)
 - [32 excellent candidates stood for election \(!\)](#)
- **Diversity metric:**
 - **6 female members, 2 industry members.**
 - **9 North America (4 in Canada), 11 Europe, 1 Middle East, 8 Asia Pacific**

Chair's Report - Subcommittees

- Nominations and elections subcommittee:
 - Wei Zhang (chair), Mathini Sellathurai, Biao Chen
- Awards subcommittee:
 - Joakim Jalden (chair), Wei Yu, Wing-Kin (Ken) Ma, Min Dong
- Marconi award subcommittee:
 - Bruno Clerckx (chair), Yindi Jing, Shi Jin
- Industry/government subcommittee:
 - Eleftherios Karipidis (chair), Raghavan Vasanth
- Newsletter subcommittee:
 - Chandra Murthy (chair), and Waheed U. Bajwa (IEEE SPS visibility representative)
- Education subcommittee:
 - Emil Björnson (chair), Christopher Studer
- Geographical representatives:
 - Lutz Lampe (Canada/US/Americas), Phillipe Ciblat (Europe), Tony Quek (AsiaPacific)

TC Representations on IEEE Boards

- IEEE SPS Technical Directions board ([W. Yu](#))
- IEEE SPS Awards Board ([U. Mitra](#) and [E. G. Larsson](#))
- IEEE SPS Fellow Reference Committee ([Z.-Q. Luo](#), [U. Mitra](#))
- Steering committee of IEEE Trans. Wireless Comm. ([U. Mitra](#))
- Steering committee of IEEE Trans. Mobile Computing ([T. Davidson](#))
- Steering committee for IEEE Wireless Commun. Letters ([D. Love](#))
- Editor-in-Chief of IEEE Wireless Comm. Letters ([W. Zhang](#))
- RFID Council: ([Feifei Gao](#))

Chair's Report – Award Nominations

- IEEE SPS Society Award: Yonina Eldar, **(not successful)**
- IEEE SPS Technical Achievement Award: Geoffrey Ye Li, **(not successful)**
- IEEE SPS Best Paper Award: **(no nomination)**
- IEEE SPS Young Author Best Paper Award:
 - Morteza Mardani, Gonzalo Mateos, and Georgios B. Giannakis, "Subspace Learning and Imputation for Streaming Big Data Matrices and Tensor", *IEEE Transactions on Signal Processing*, vol. 63, no. 10, pp. 2663-77, May 15, 2015. **(successful)**
- IEEE SPS Magazine Best Paper Award:
 - W. Saad, Z. Han, M. Debbah, A. Hjørungnes and T. Basar, "Coalitional game theory for communication networks," in *IEEE Signal Processing Magazine*, vol. 26, no. 5, pp. 77-97, Sept. 2009. **(not successful)**
- IEEE SPS Magazine Best Column Award:
 - R. Faragher, "Understanding the Basis of the Kalman Filter Via a Simple and Intuitive Derivation" [Lecture Notes], in *IEEE Signal Processing Magazine*, vol. 29, no. 5, pp. 128-132, Sept. 2012. **(successful)**

Chair's Report – Distinguished Lecturers

- IEEE SPS Distinguished Lecturers
 - Geert Leus, **(successfully nominated by the TC for this year)**
 - Wing-Kin (Ken) Ma, (current TC member)
 - Rick Blum, (former TC member)
 - Athina P. Petropulu **(successfully nominated by the TC from last year)**
- IEEE SPS Distinguished Industrial Speaker
 - Thomas Marzetta **(successfully nominated by the TC for this year)**

Chair's Report – Award Winners

- **Donald G. Fink Overview Paper Award:**

- *Lu Lu, Geoffrey Ye Li, A. Lee Swindlehurst, Alexei Ashikhmin, Rui Zhang: “An Overview of Massive MIMO: Benefits and Challenges”, IEEE Journal of Selected Topics in Signal Processing, Volume 8, No. 5, October 2014*

- **IEEE SIGNAL PROCESSING SOCIETY Best Paper Award:**

- *Foad Sohrabi, Wei Yu: “Hybrid Digital and Analog Beamforming Design for Large-Scale Antenna Arrays”, IEEE Journal of Selected Topics in Signal Processing, Volume 10, No. 3, April 2016*

- **IEEE SIGNAL PROCESSING SOCIETY Young Author Best Paper Award:**

- *Jie Xu, Liang Liu, (Co-Author: Rui Zhang), “Multiuser MISO Beamforming for Simultaneous Wireless Information and Power Transfer”, IEEE Transactions on Signal Processing, Volume 62, No. 18, September 2014*

- **IEEE FELLOW Class of 2017**

- **Tony Q. S. Quek** (current TC member)
- **Mounir Ghogho, Weifeng Su, Sergiy Vorobyov** (past TC members)

Chair's Report – ICASSP Statistics

ICASSP 2012 (Kyoto)	115 accepted out of 218 submitted	8.3% of ICASSP
ICASSP 2014 (Florence)	205 accepted out of 387 submitted + 5 SPL papers	11.6% of ICASSP
ICASSP 2013 (Vancouver)	187 accepted out of 391 submitted + 12 SPL papers	11.0% 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 (Comparison: SAM 147 submissions SPTM has 331 submissions)	6.2% of ICASSP

Chair's Report – 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)	281 paper submitted (Regular Papers: 162. Special Session: 107. Invited Thematic Papers: 12)	

- Financial results:
 - 2015: Surplus of \$27K out of \$68K expenses (28% surplus)
 - 2016: Surplus of £14K out of £67K expenses (17.5% surplus)
 - 2017: Surplus of \$24K out of \$129K expenses (18.8% surplus)

Chair's Report – GlobalSIP Participation

- GlobalSIP 2016:
 - M. Rabbat co-organized a symposium on SP Over Networks
 - Z.-Q. Luo and M. Hong co-organized a symposium on Distributed Information Processing, Optimization and Resource Allocation over Networks
 - M. Juntti co-organized a symposium on Transceivers and SP for 5G and mmWave.
 - SPCOM related symposia on Info Theoretic Security (Schaefer, Boche), Cognitive Radio (Poor)
- GlobalSIP 2017:
 - Z.-Q. Luo and M. Hong co-organized a symposium on Distributed Optimization and Resource Allocation over Networks
 - M. Rabbat co-organized a symposium on Graph Signal Processing
 - SPCOM related symposium on Full-duplex (Gross)
- GlobalSIP 2018:
 - Z.Q. Luo and M. Hong are co-organizing Distributed Resource Allocation and Learning.
 - SPCOM related symposia: Green Communications (Zhi Ding), 5G Satellite Network, Intelligent Vehicle Communication, mmWave, Network Security (Yingbo Hua)

Chair's Report – Tasks Ahead

- February 15, 2018:
 - Nominations for the Marconi award (passed, no submission this year)
- April 20, 2018:
 - SPAWC Paper Reviews and Decisions (TPC Co-Chairs of SPAWC)
- May 31, 2018:
 - Nominations for Distinguished Lecturers (Responsibility: TC chair, Awards subcommittee)
- September 1, 2018:
 - Nominations for Paper Awards: BPA, YABPA, MBPA, LBPA, OPA, SIPA (Responsibility: TC Vice-Chair, Awards subcommittee)
 - Nominations for Society Award, Technical Achievement Award (Responsibility: TC Chair, Awards subcommittee)
- November 15, 2018:
 - Membership election completed (Responsibility: Elections and nominations subcommittee)
- November – December 2018:
 - ICASSP Paper Reviews and Decisions (Responsibility: TC-chair)
- February 15, 2019:
 - Nominations for the Marconi award (Responsibility: Marconi subcommittee)

Report from SPAWC 2017

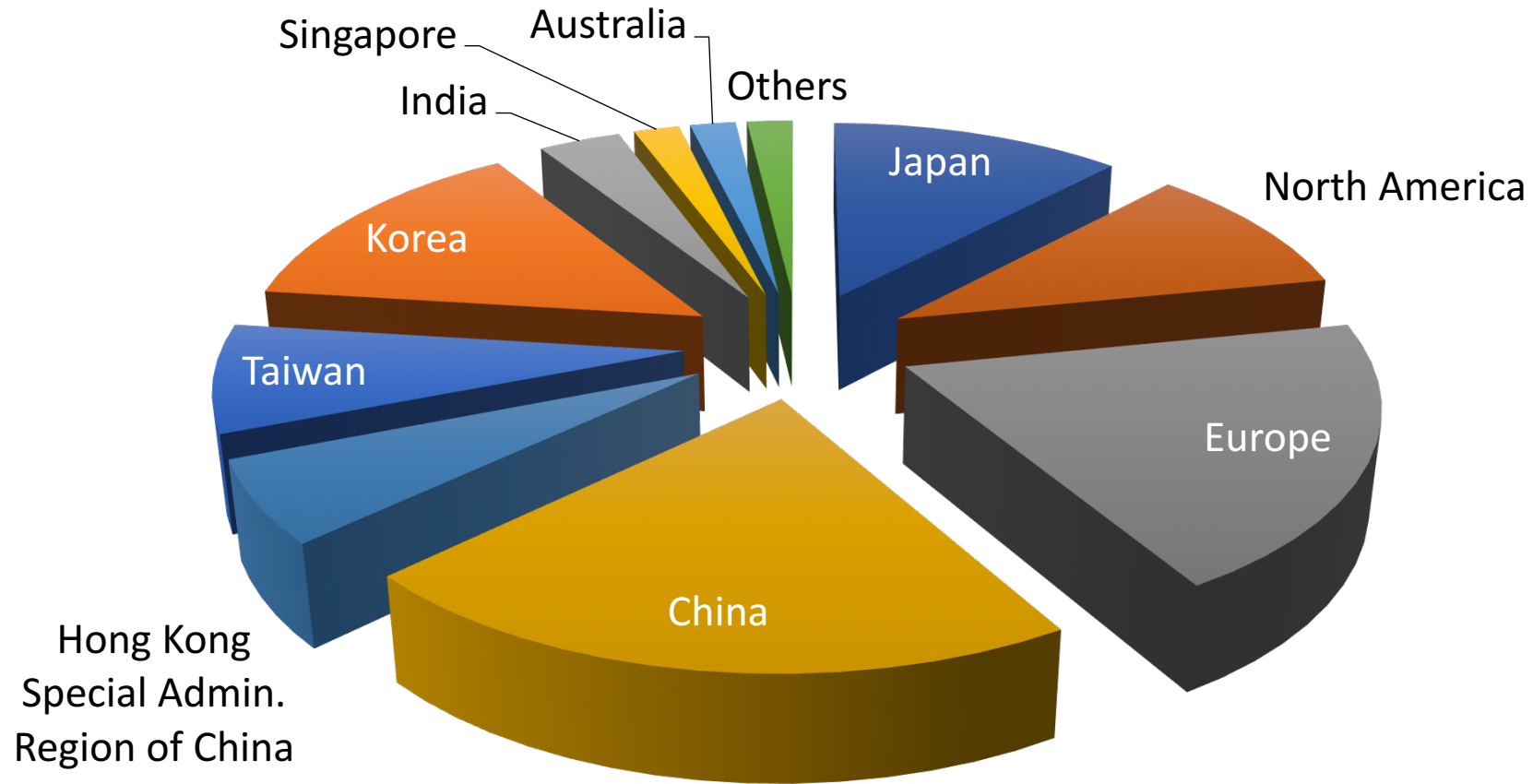
- Advanced SPS member registration fee: US\$575 (JPY 60,000)
- Reception at Sapporo TV Tower. Banquet at Sapporo Park Hotel.
- Two Student Best Paper Awards
- Regular paper acceptance rate: 58%.
- Invited special session: 76 papers; 15 sessions.



SPAWC 2017

**The 18th IEEE International Workshop on Signal Processing Advances
in Wireless Communications, July 3 – 6, Sapporo, Japan**

Attendee Statistics of SPAWC 2017



A record of 268 attendees

Update from SPAWC 2018 and 2019

- SPAWC 2018: June 25-28, 2018 in Kalamata, Greece.
- SPAWC 2019: July 2-5, 2019 in Cannes, France
- Both are on track!



SPAWC 2020

- The TC aims to decide SPAWC two years in advance
- Normal procedure is to make decision at ICASSP.
- Key dates:
 - INFOCOM 2020: April 27-30, Beijing, China
 - ICASSP 2020: May 4-9, Barcelona, Spain
 - ICC 2020: June 7-11, Dublin, Ireland
 - ISIT 2020: July ??, Los Angeles, USA
- Proposal from Georgia Tech
- Expression of interests from Taiwan

Proposal for SPAWC 2020 at
Georgia Institute of Technology
Atlanta, USA

Geoffrey (Ye) Li, Zhengdao Wang, Xiaoli Ma

Award Nomination Process

- In 2016 a large number of papers were considered, resulting in
 - A large number of award level (long) reviews
 - A lot of work in the voting process
- In 2017 the number of papers considered were reduced
 - Almost all award level reviews came back negative
 - Most positive for papers with TC co-authors
 - No BPA nomination was made by the TC
 - no paper reached a sufficient number of endorsements
 - Both chair (awards committee) and vice-chair (co-author) excused

Discussion

- Was what happened (no BPA nomination) a problem?
- Should we have a larger number of award level reviews again?
- Other input?

Membership Election

- Current Scheme:
 - Last year, we had 7 openings and 32 candidates.
 - Every TC member has 7 votes. Endorsements are used to break ties.
 - Votes are usually very close. Ties almost always happen.
 - It is difficult to decide the best 7 among 32 candidates.
- Possible Change of Procedure:
 - Allow fractional votes, between 0 to 1, up to one decimal.
 - Each TC member has 7 points, which can be distributed to many candidates.
 - TC members can still vote as in the old scheme, if they wish.
 - Ties will unlikely to occur.
 - Endorsement now really means “endorsement”.