



IEEE Signal Processing Society
Sensor Array and Multichannel (SAM) Technical Committee
Minutes of the CAMSAP 2017 Meeting
Curacao, Dutch Antilles – Monday December 11, 2017; 1:30 PM - 3:30 PM local time
Santa Barbara Beach and Golf Resort, Room: Arawak A

Present TC Members: Fauzia Ahmad, Waheed U. Bajwa, André L.F. de Almeida, Yonina Eldar, Martin Haardt (Chair), Yongwei Huang, Eduard Jorswieck, Geert Leus, Gonzalo Mateos-Buckstein, Christoph Mecklenbräuker (Vice-Chair, participated remotely via Skype), Frederic Pascal, Marius Pesavento, Peter Willett (Past Chair), Yimin Zhang.

Associate TC Members: Rick Blum, Charles Cavalcante, Sundeep Chepuri, Daniel P. Palomar, Shahram Shahbazpanahi

Guests: Yoann Altmann, Nuria González Prelcic (new member 2018), Cédric Richard, Florian Roemer, Jens Steinwandt, Jean-Yves Tournet

§1. Welcome of New TC Members and Short Introduction

§2. CAMSAP 2019 Proposal (Guadeloupe, French West Indies) presented by Jean-Yves Tournet

- The workshop is proposed for Dec. 8-12, 2019 or Dec. 15-18, 2019.
 - Dec. 8-12, 2019 is preferable because of final exams in the US during the later dates.
 - It is noted that IEEE GLOBEOM is scheduled for Dec. 9-13, 2019 (Hawaii).
- Workshop proposal committee members:
 - General Co-Chairs: David Brie (Univ. of Lorraine) and Jean-Yves Tournet (Univ. of Toulouse)
 - Technical Co-Chairs: Geert Leus (TU Delft), Antonio Marques (King Juan Carlos Univ.)
 - Finance Chair: Mónica Bugallo (Stony Brook Univ.)
 - Special Sessions: Romain Couillet (Centrale Supélec), Yohann Altmann (Heriot-Watt Univ.)
 - Publication Chair: Nicolas Gilis (Univ. of Mons)
 - Local Chairs: Cédric Richard (Nice Sophia-Antipolis Univ.) Guillaume Ginolhac (Univ. Savoie)
- Two options for workshop location:
 - Option 1: Le Gosier
 - Option 2: Deshaies

Jean-Yves Tournet will check the options for the venue/location and decide.

- Tentative Registration Fees:

IEEE Member:	USD 750
SPS IEEE Member:	USD 650
IEEE Student Member:	USD 400
Non-Member:	USD 900

Registration fees include Buffet lunches, coffee breaks, welcoming reception, banquet.
- Further details, see slide set [Proposal_Camsap2019_vf.pdf](#)
- The SAM TC committee is asked to formally vote on this workshop proposal via e-mail.

§3. Report from the Chair

§3.1 Awards

Young Author Best Paper Award: Ahmed Alkhateeb and Omar El Ayach, for the paper co-authored with Geert Leus and Robert W. Heath, Jr., for "Channel Estimation and Hybrid Precoding for Millimeter Wave Cellular Systems", *IEEE Journal of Selected Topics in Signal Processing*, Volume 8, No. 5, October 2014.

Signal Processing Letters Best Paper Award: Ye Yang, Qiang Li, Wing-Kin Ma, Jianhua Ge and P. C. Ching, for "Cooperative Secure Beamforming for AF Relay Networks With Multiple Eavesdroppers", *IEEE Signal Processing Letters*, Volume 20, No. 1, January 2013.

Signal Processing Magazine Best Paper Award: David I. Shuman, Sunil K. Narang, Pascal Frossard, Antonio Ortega and Pierre Vandergheynst, for "The Emerging Field of Signal Processing on Graphs [Extending high-dimensional data analysis to networks and other irregular domains]", *IEEE Signal Processing Magazine*, Volume 30, No. 3, May 2013.

Technical Achievement Award: Jelena Kovacevic, "for contributions to the theory and practice of signal representations."

§3.3 Distinguished Lecturers of the IEEE SPS and their Topics

- Athena P. Petropulu
- Brian M. Sadler

§3.4 History of ICASSP submissions in the SAM technical area

Annual figures for SAM submissions as a fraction of total ICASSP submissions:

2018: 147 / 2738 = 5.4 %	Calgary, Canada
2017: 170 / 2697 = 6.3 %	New Orleans, USA
2016: 200 / 2682 = 7.5 %	Shanghai, China
2015: 212 / 2322 = 9.1 %	Brisbane, Australia
2014: 222 / 3544 = 6.3 %	Florence, Italy
2013: 216 / 3362 = 6.4 %	Vancouver, Canada
2012: 171 / 2615 = 6.5 %	Kyoto, Japan

- SAM submissions were unusually high at ICASSP 2015 (Brisbane, Australia), perhaps due to the concentration of SAM surveillance topics in Australia
- SAM submissions are unusually low for upcoming ICASSP 2018 (Calgary, Canada)

§3.5 SAM TC Archiving initiative (Responsible: Waheed U. Bajwa)

- IEEE is willing to house them, link from web page.
- Presently the following workshops have been archived:
SAM 2002, 2010, 2014, 2016
CAMSAP 2005, 2007, 2009, 2011, 2013, 2015
- Still missing are: SAM 2004, 2006, 2008, 2012
 - Waheed will contact the general chairs of SAM 2012

§3.6 Feedback from SAM TC Review (March 9, 2017)

- Feedback from the review committee: The SAM TC has solid plans to achieve its goals and broaden its visibility, diversity, and impact.

- The SAM TC has created the YouTube channel “IEEE SAM Technical Committee” to archive lectures given at its workshops/conferences (after obtaining permissions from the speakers). Currently there is one lecture there by Lieven de Lathauwer (CAMSAP 2013) on Tensor Tools for Multisensor Processing.
 - We start new video recordings with the CAMSAP 2017 plenary lectures. The IEEE SPS has decided that the videos should go into the SPS Resource Centre. We also have an SPS YouTube channel, where a select few of the videos can go.
 - We need a copyright transfer form that will need to be signed by each speaker.
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- Membership Diversity in gender: good
 - Membership diversity in regions: good
 - low number of members from industry and government labs: shall be discussed in the Industry/Government Subcommittee. There will be a special session at ICASSP 2018 devoted to Open Problems in Industry.
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- SAM TC Signal Processing Student Cup Proposal 2018: “Signal Processing for Cracking Cryptographic Algorithms” by Yi Han, Saman Zonouz, Athina Petropulu unfortunately not successful. New proposal should be discussed in the Technical Directions Subcommittee for 2019
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- We would like to increase the pool of student affiliate members and increase their participation in the TC activities: shall be discussed in the Students Subcommittee
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- SAM TC has relatively few postings in the Job Marketplace. We expect the number of postings will improve as the number of members from industry increases.
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- We feel that SAM-TC communicates effectively with its membership through its well-maintained website and its numerous meetings. Nonetheless, it needs to reach out more regularly to SPS membership through its Newsletter. This requires attention by the Chair, the Vice-Chair, and the Newsletter subcommittee. Next newsletter after CAMSAP 2017.
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- The Industry/Government Subcommittee should discuss strategies to attract more people from industry and government labs.
 - Sessions with open problems for industry can be a way to attract new interested people and new members from industry (have panels with panel sessions from industry).
 - volunteers in the discussion: Yonina, Nuria, Shahram, Martin
 - Yonina will contact ICASSP 2018 organizers to see how to enable a panel session from industry.

§3. Workshop Reports

- §3.1 Preliminary CAMSAP 2017 report presented by André de Almeida.
- Paper acceptance rate 67 %, approximately 200 submissions
 - 19 special sessions, oral presentation only
 - 25% of attendees are students (51 student papers accepted)
 - low number of industrial contributions
 - Two tutorials:

- Tutorial by Josef A. Nossék: The Multiport Communication Theory
- Tutorial by Georgios B. Giannakis: Learning Nonlinear and Dynamic Connectivity and Processes over Graphs
- Topics of special sessions are linked to the plenary talks on the same day
Video recordings of the CAMSAP 2017 plenaries will be viewable on YouTube
- The all-inclusive CAMSAP 2017 registration package was accepted by IEEE SPS in the end.
- An IEEE SPS Questionnaire will be distributed to all participants.

§4. Progress report on planning of future workshops

§4.1 SAM 2018 progress report presented by Peter Willett

- SAM 2018 will be held in Sheffield, UK, from July 8-11, 2018,
- Tutorial proposals are due by Jan. 22, 2018.
- Special session proposals are due by Feb. 5, 2018.

§4.2 CAMSAP 2019 proposal presented by Jean-Yves Tournet

- See §2 above, SAM TC will vote on the CAMSAP 2019 (Guadeloupe) proposal via e-mail (see slide set)-

§5. Feedback from the Subcommittees 2017 (skipped due to time reasons)

- The subcommittees of the SAM TC have the following members:
 - **Technical Directions** (A. Petropulu, J. Li, K. M. Wong, P. Willett)
 - **Awards** (G. Leus, Y. Eldar, A. Napolitano, L. Huang)
 - **Nominations and Elections** (F. Gini, E. Jorswieck, Y. Zhang, V. Matta)
 - **Workshops** (M. Bugallo, A. L. F. de Almeida, W. Liu, K. Abed-Meraim)
 - **Webmaster** (W. U. Bajwa, M. Ghogho)
 - **Newsletter** (M. Pesavento, C. Mecklenbräuker, H. Li)
 - **Membership** (P. Pal, Y. Huang)
 - **Industry/Government** (B. Himed, C. M. Samson-See, P. Chevalier)
 - **Education** (A. Wiesel, M. Stojanovic, B.-N. Vo)
 - **Student** (S. A. Cheema, P. Schniter)
 (underline means chair)
- Area Chairs
 - Applications of SAM processing (B. Sadler)
 - Beamforming and space-time processing (M. Haardt)
 - Detection, estimation, and source separation (V. Cevher)
 - Multi-antenna and multi-channel comm. (C.-Y- Chi)
 - Radar array processing (F. Ahmad)
 - Sensor array processing (X. Mestre)
 - Sensor networks (A. Pandharipanda)
- Four Regional Representatives
 - USA (R1-R6): G. Mateos
 - Canada/Latin America (R7/R9): J. Benesty
 - Europe/Mid East/Africa (R8): F. Pascal
 - Asia/Pacific (R10): Q. He

§6. Interaction with AASP-TC

Requested by AASP due to several joint interests, especially in microphone array topical area. (IEEE SPS does encourage cooperation among its TCs).

- Near-term initiative:
 - SAM and AASP have organized a special session on “Speaker Localization in Dynamic Real-Life Environments” at ICASSP 2017
- Medium-term initiatives:
 - SAM may ask to co-sponsor HSCMA (Hands-Free Communication and Microphone Arrays) Workshop
 - every 3 years
 - the last one in San Francisco, CA, just before ICASSP 2017.
 - not financially sponsored by IEEE
 - Special issue in the IEEE Journal of Selected Topics in Signal Processing (JSTSP)
 - Proposed topic
“Acoustic source localization and tracking in dynamic real-life scenes”
 - Proposed guest editors
 - Sharon Gannot, Bar-Ilan University, Israel
 - Martin Haardt, Technische Universität Ilmenau, Germany
 - Walter Kellermann, Friedrich-Alexander Universität Erlangen-Nürnberg, Germany
 - Peter Willett, University Of Connecticut, USA
- Long-term thoughts
 - AASP may be interested in co-sponsorship of our SAM workshops and to this end we should define a set of joint EDICs

§7. Close of the Meeting

- We plan to have the next SAM TC meeting during ICASSP 2018 in Calgary. Hopefully most of the SAM TC members will be able to participate in this meeting.
- The meeting was adjourned at 15:30 (Curacao local time).