



**IEEE Signal Processing Society
Sensor Array and Multichannel (SAM) Technical Committee
Minutes of the SAM 2016 Meeting
Rio de Janeiro, Brazil – Wednesday, July 13, 2016; 12:30-14:00
PUC, IAG Bldg, Room 1**

Present TC Members: Fauzia Ahmad, André L.F. de Almeida, Waheed Bajwa, Martin Haardt (Vice-Chair), Braham Himed, Geert Leus, Jian Li, Christoph Mecklenbräuker, Gonzalo Mateos, Peter Willett (Chair), Yimin Zhang.

Guests: Rick Blum, Rodrigo de Lamare, Didier Le Ruyet, Panos Markopoulos, Kon Max Wong

§1. Welcome of New TC Members and Short Introduction

- The chair welcomed the 7 newly-elected SAM TC members Fauzia Ahmad, Waheed Bajwa, Gonzalo Mateos, Piya Pal, Qian He, Hongbin Li, and Andre de Almeida, of whom Fauzia Ahmad, Waheed Bajwa, Gonzalo Mateos, and Andre de Almeida were present at the meeting.
- Moreover, Xavier Mestre, Philip Schniter, Ami Wiesel, Kainam Thomas Wong, and Chong-Yung Chi have been reelected for a second term.
- Furthermore, the chair thanked the outgoing members Maria Sabrina Greco, Yingbo Hua, Steven Thomas Smith, A. Lee Swindlehurst, Joseph Tabrikian, and Rui Zhang.
- Currently, the SAM TC has 5 female and 35 male members. Out of these members, 4 work in industry / research labs and 36 members work in academic institutions. The regional distribution is as follows: 19 R1-6, 1 R7, 13 R8, 1 R9, 5 R10.

§2. TC Status Report from the Chair

§2.1 Awards

- The Chair announced that 2016 was, again, a successful year for award nominations. The following nominations were successful. Note that the first 3 awards are awards to SAM people, although our SAM TC did not initiate the nomination process.
 - **SPS Education Award:**
 - Ali Sayed (SPS President-Elect too!), “for the writing of scholarly and influential texts in the areas of adaptive systems and statistical signal processing.”
 - **IEEE Kiyo Tomiyasu Award:**
 - Yonina Eldar, “for the development of the theory and implementation of sub-Nyquist sampling with applications to radar, communications and ultrasound.”
 - **IEEE Gustav Robert Kirchoff Award**
 - P. P. Vaidyanathan, “for fundamental contributions to digital signal processing.”
 - **Young Author Best Paper Award:**

- D. Papailiopoulos and A. Dimakis, “Interference Alignment as a Rank Constrained Rank Minimization,” *IEEE Transactions on Signal Processing*, August 2012.
 - **IEEE Signal Processing Letters Best Paper Award:**
 - A. Zymnis, S. Boyd, and E. Candès, “Compressed Sensing With Quantized Measurements,” *IEEE Signal Processing Letters*, vol. 17, no. 2, February 2010.
 - **Best Paper Award:**
 - M. Davenport, P. Boufounos, M. Wakin, and R. Baraniuk, “Signal Processing With Compressive Measurements,” *IEEE Journal of Selected Topics in Signal Processing*, April 2010.
 - **Best ICASSP Student Paper Award:**
 - C.-L. Liu and P. P. Vaidyanathan, “Super Nested Arrays: Sparse Arrays with Less Mutual Coupling than Nested Arrays,” in Proc. IEEE ICASSP 2016, Shanghai, China.
- 2017 Awards
 - Rick Blum’s Distinguished Lecturer nomination was approved and forwarded to SPS.
 - Voting is underway in the SAM TC – as you know!
 - Some of our TC members are nominated.
 - If they will be selected, we will explore ways to get them nominated.
 - In the case of TC members who also hold higher places in SPS the situation is not clear.
 - The chair volunteered to prepare the spreadsheets of papers with updated citation counts for the committee.
 - This year we have used Scopus instead of Google Scholar counts.
 - Since our chair (Peter Willett) knows how to “automate” the task, he has volunteered to do it next year.

§2.2 ICASSP 2015 Submissions

- SAM received 197 paper submissions and 98 were accepted at ICASSP 2015. This corresponds to a 50 % acceptance rate, as the conference organizers have requested.
- Additionally, 5 Signal Processing Letters were presented in SAM sessions.
- The papers were distributed to five lecture sessions (6 papers each) and eight poster sessions with 9 to 12 papers each.
- The Chair pointed out that the percentage of SAM paper submissions to ICASSP 2015 in Brisbane (9.1 %) was unusually high, perhaps due to the concentration of SAM surveillance topics in Australia.
 - 2016: $200/2682 = 7.5 \%$
 - 2015: $212/2322 = 9.1 \%$
 - 2014: $222/3544 = 6.3 \%$
 - 2013: $216/3362 = 6.4 \%$
 - 2012: $171/2615 = 6.5 \%$

§2.3 SAM TC Archiving initiative

- According to Waheed’s suggestion, we will archive the websites of our SAM and CAMSAP workshops.
 - This is necessary since past workshops are often housed on university servers, and will be eventually removed.

- IEEE is willing to house them. We will provide the link from the SAM TC web page.
- Presently the CAMSAP workshops have been archived, except for CAMSAP 2007 which is lost.
- Next, we will work on the SAM workshops.
- Maybe the workshops of future SAM and CAMSAP workshops should already be located on this IEEE server.
- Moreover, we will list the names of our past SAM TC chairs and vice-chairs along with important past events on our web page. Maybe we can get some historic information from the minutes of the SAM TC meetings
 - Max Wang mentioned that the SAM TC was created in 1998, and the first SAM TC chairs were José Moura, Arye Nehorai, Max Wong, Mike Zoltowski, and Alex Gershman.

§3. Workshop Reports

§3.1 SAM 2016

- Rodrigo de Lamare presented a report about SAM 2016 (sam2016.cetuc.puc-rio.br) that took place at the Pontifical Catholic University of Rio de Janeiro (PUC-Rio).
- The workshop was held from July 10 – 13, 2016, about a month before the 2016 Summer Olympic Games.
- There were three tutorials (on Sunday, July 10, 2016), five plenary talks (Stephen P. Boyd, P. P. Vaidyanathan, A. Lee Swindlehurst, Hélio Librantz, and Bhaskar Rao), 15 special sessions as well as several regular sessions.
- We have received 220 submitted papers, 86 in regular sessions (53 % acceptance rate), 4 invited papers, and 130 special session papers. There were 215 attendees at the workshop.
- Rodrigo de Lamare also explained why he decided to modify the Organizing Committee of SAM 2016.

§3.2 CAMSAP 2017

- Martin Haardt presented a short report about CAMSAP 2017 (<http://www.cs.huji.ac.il/conferences/CAMSAP17/>) to be held in Curacao, Dutch Antilles, from December 10 – 13, 2017. The web site is already operational.
- The workshop will take place in the Curacao Marriott Beach Resort and Emerald Casino Hotel, which is close to the capital Willemstad. Note that Willemstad is a UNESCO World Heritage city.
- The Local Arrangement Chairs Geert Leus and Robert Heath were also involved in the organization of the IEEE Communication Theory Workshop (CTW) 2014 that took place in the same venue (Marriott Hotel) in Curacao and received really good feedback by the attendees. The SAM TC members and affiliates are encouraged to propose special sessions. The due date for special session proposals is on February 15, 2017. The paper submission deadline is on June 15, 2017.

§3.3 SAM 2018

- An update on SAM 2018 to be held in Sheffield from July 8-11, 2018 was presented by Peter Willett (general chairs: Wei Liu and Peter Willett).
- Sheffield, the “Steel City”, the third largest English district by population, is located within the beautiful valleys of the River Don. An estimated 2 million trees in the exuberant city,

giving Sheffield the highest ratio of trees to people of any city in Europe. The city is also proud of its independent and authentic atmosphere, from award-winning theatre to striking art spaces, arena filling concerts to independent cinema, the great outdoors to inner city pampering.

- The technical sessions of FUSION 2018 (Cambridge, UK) will fortuitously be held July 11-13, 2018 (usual attendance: 400 – 500 people). The conferences will coordinate to eliminate conflicts and encourage cross-participation.

§4. Interaction with AASP-TC

- Some interaction of our TC with the AASP-TC has been requested by the AASP-TC due to some commonality in interests, especially in microphone array topical area.
- IEEE SPS does encourage cooperation among its TCs.
- Near-term steps:
 - We have already had a special session on “Sound Signal Processing” at SAM 2016.
 - Peter Willett (SAM TC - Chair) and Sharon Gannot (AASP TC – Vice Chair) have proposed a joint special session on “Speaker localization in dynamic real-life environments” for ICASSP 2017. Seven papers with author list and abstracts, three from SAM and four from AASP, have been listed in this proposal.
- Medium-term initiative:
 - SAM may co-sponsor HSCMA (Hands-Free Communication and Microphone Arrays) Workshop.
 - Workshop is every 2-3 years.
 - Not financially sponsored by IEEE.
- Long-term thoughts:
 - AASP might be interested in co-sponsorship of SAM

§5. Awards Procedures

- According to SPS Policy 5.7 (accepted wording) “TC/SIG’s may not nominate a current elected member of their own TC/SIG for an award. However, current elected members of a TC/SIG may participate as individual nominators for other members of the same TC/SIG.”
- The bottom line is:
 - A TC may make nominations for paper- and personal awards that do not involve (current!) TC members
 - A TC may not make nominations for paper- and personal awards that do not involve current TC members, but
 - a TC may nominate or endorse members of other TCs
 - an individual TC member can nominate or endorse another member of that TC
- We decided to:
 - Include all candidates in the pool of award nominations that the TC will consider.
 - If the TC’s selection happens to involve a TC member then the TC Chair will solicit an individual nomination
 - If so, a second non-member selection be pursued.
 - This last was not a concern in the past year.

§6. Discussion Topics

- Acceptance rate at workshops:

- IEEE has contacted Chair Willett in regards to the acceptance rate of submitted manuscripts at SAM workshops.
 - According to SPS documents, the nominal acceptance rate is 45 %, with an “absolute cap” of 50 % (dates from 5/30/13).
 - Our response has been that our workshops have a large proportion of invited papers in special sessions.
 - Our response could also be that our workshops attract a large proportion of senior SAM persons, and hence an acceptance rate that would apply to a large untargeted conference such as ICASSP are inapplicable. However, this was not mentioned.
- The IEEE Signal Processing Society (SPS) invites nominations for the position of Awards Board Chair. The term for the Awards Board Chair position will be three years (1 January 2017 - 31 December 2019).
 - NOTE: The Awards Board Chair must be an IEEE Fellow and must have received one or more major Society awards, which excludes the paper awards. The profile of the Awards Board Chair should bring positive attention to the awards program.
- Membership categories
 - The SAM TC has considered its membership categories, with special attention to Associate Member list and whether it is of an appropriate size.
 - Now, given our review needs (see the previous item for ICASSP numbers) the present list of approximately 75 seems appropriate.
 - However, we will examine the Associate Member list to identify “dormant” members.
 - **Associate members** in SAM are past SAM members, or unsuccessful member applicants nominated by SAM members.
 - Their technical levels are high and they have been giving us big help in reviewing ICASSP papers.
 - **Affiliate members** are free to join with no criteria needed, there is no quality control in their technical levels. Affiliate members generally join through the website.
 - the application comes to the SAM-TC Chair who evaluates and adds their names to the lists/logs on a periodic basis.
 - Affiliate status is not a pre-requisite for eventual election. It is however perhaps helpful to a TC candidacy, since it evidences interest and engagement.
 - In the past Dominic Ho sent out TC meeting reports and notices of workshop activities and elections / nominations to affiliate members. There was an idea of inviting affiliates to TC meetings during SAM workshop/CAMSAP to make them feel more involved, especially lunches are included in our workshops, but it has not yet happened. It probably should, and should be part of the workshop budget; but it would make the budget a bit uncertain.
- GlobalSip
 - As we know, the CAMSAP workshop has traditionally been held the middle week of December in odd years.
 - GlobalSip was held the first week of December in 2013 (Austin) and in 2014 (Atlanta).
 - However, in 2015 GlobalSip (Orlando) conflicted directly with CAMSAP 2015 (and with an SPE workshop).
 - This did not do any harm to CAMSAP.
 - At present there is no GlobalSip 2017.
 - Extended call for proposals ended May 27, 2016.
 - We could propose a SAM symposium at GlobalSip 2018.

- Braham Himed mentioned that he could provide some radar data for a future SP Cup competition for students.

§7. Close of the Meeting

- We plan to have the next SAM TC meeting during ICASSP 2017 in New Orleans. Hopefully most of our members will be able to participate in this meeting.
- The meeting was adjourned at 13:40.