SAM TC MEETING ICASSP 2015

April 23rd, 2015
Brisbane Convention and Exhibition Centre Room P6

AGENDA

13:00   Welcome new TC members/introductions

13:10   Lunch and report from the chair
        Awards, Distinguished Lecturers,
Fellows
        ICASSP 2015 submissions
        TC status
        GlobalSip 2015

13:25   Workshop Reports
        SAM 2014 (Marius Pesavento
                & Maria Sabrina Greco)
        CAMSAP 2015 (Petar Djuric)
        SAM 2016 (Martin Haardt)

13:40   Proposal for CAMSAP 2017
                (Andre de Almeida, Geert
Leus
                Martin Haardt & Robert
Heath)

14:00   New Awards Procedures
                How does it affect our practices?
                How can we move forward?
                Baker Award

14:20   Discussion topics
                Old business
                Voting procedures
                SPS SP Cup, SPS TC Competition
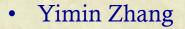   Role of Associate Members
                Visibility Initiative
                Online Content and Social Media

14:30   End

SAM MEMBERSHIP

New Members

- Jacob Benesty

- Fulvio Gini

- Eduard Jorswieck

- Frederic Pascal

- Brian Sadler

- Ba-Ngu Vo

- Yimin Zhang

Retiring Members

- Olivier Besson

- Rick Blum

- Anne Ferreol

- Visa Koivunen

Statistics

- 5 female, 35 male

- 16 R1-6, 1 R7, 18 R8, 5 R10

- 6 Industry/Lab, 34 Academic

2014 SAM AWARDS

- **Technical Achievement Award:**

  Moeness Amin.

- **Meritorious Service Award:**

  V. John Mathews.

- **Young Author Best Paper Award:**

  Meisam Razaviyayn, Gennady Lyubeznik, and Zhi-Quan Luo, "On the Degrees of Freedom Achievable Through Interference Alignment in a MIMO Interference Channel," IEEE Transactions on Signal Processing, Volume: 60, No. 2, February 2012.

- **Signal Processing Magazine Best Column Award:**

  Göran Bergqvist and Erik G. Larsson, "The Higher-Order Singular Value Decomposition: Theory and an Application," vol. 27, no. 3, May 2010.

- **Best Paper Award:**

  Federico Cattivelli and Ali Sayed, "Diffusion LMS Strategies for Distributed Estimation," Transactions on Signal Processing March 2010.

- **Best ICASSP Student Paper Award:**

  Sundeep Prabhakar Chepuri and Geert Leus, "Sparse Sensing for Distributed Gaussian Detection," ICASSP 2015, Brisbane Australia.

DL'S, FELLOWS AND EDITORS

- **SAM Fellows:**
  - Kristine Bell, Biao Chen
  - BTW, a TC is not allowed to endorse a Fellow nomination … although a TC Chair may of course still provide a Fellow endorsement or reference

- **Associate Editor:**
  - Qian He, IEEE Transactions on Signal Processing

- **Distinguished Lecturer**:
  - Visa Koivunen, successful

2015 ICASSP SAM DATA

- 206 papers submitted, 114 accepted. This means a 55% acceptance rate, as the conference organizers requested.
- Additionally there will be 6 Signal Processing Letters presented in SAM sessions.
- Five 6-paper lecture sessions, seven 7 12-paper poster sessions plus one 6-paper poster session.

- L1 - MIMO Radar
- L2 - Co-Prime Arrays
- L3 - Compressive Sensing
- L4 - SAM for Wireless   Communications
- L5 - Multi-Dimensional and Tensor-Based   Signal Processing
- P1 - Radar Array Processing
- P2 - Microphone and Acoustic Array   Processing
- P3 - Source Localization and Tracking
- P4 - Beamforming
- P5 - Detection, Classification and Localization
- P6 - DOA Estimation
- P7 - SAM Networks
- P8 - Applications of Beamforming (short)

- SAM is a higher percentage of ICASSP than usual:
  - 2015: 212/2322 = 9.1%
  - 2014: 222/3544 = 6.3%
  - 2013: 216/3362 = 6.4%
  - 2012: 171/2615 = 6.5%
- Not sure what to make of this, perhaps Australia over-represents SAM (e.g., DSTO).
- Various TCs have differing acceptance rates.

Panel	# Papers	Acc	Accpt Rate	Oral	Poster (12)	Poster (6)
AASP	290	160	55%	6	11	
BISP	111	51	46%	2	4	
DISPS	40	24	56%	1	1	1
IVMSP	274	123	45%	7	7	
IFS	56	29	50%	1	2	
IDSP	18	10	56%		1	
MLSP	138	76	55%	3	5	
MMSP	41	23	56%	1	1	1
SAM	212	120	57%	5	7	1
SPCOM	166	88	53%	3	6	
SPTM	361	213	59%	8	13	2
SP	446	227	51%	10	13	2
HLT	105	49	47%	3	3	
Big Data						
SIG	26	17	65%	1	1	
IoT	11	6	55%	1		
Ed	5	3	60%			0.5

Table taken from ICASSP Overview

GLOBALSIP 2015

- 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) will conflict directly with CAMSAP (and with a SPE workshop).

- This has been raised with SPS with the hopeful suggestion that care be taken in the future (no response yet).

- We did get a request from SPS to respond how and whether the TCs would like to become more involved in GlobalSip.

- While we want to support SPS and GlobalSip, we must look close to home: please submit to CAMSAP and encourage your colleagues to do the same!

SAM WORKSHOPS

- **SAM 2014**
  - final report on excellent workshop in A Coruna, Spain
- **CAMSAP 2015**
  - interim report on soon-to-be-excellent workshop in Cancun, Mexico
- **SAM 2016**
  - preliminary report on will-be-excellent-in-a-year-and-a-bit workshop in Rio de Janeiro, Brazil
- **CAMSAP 2017**
  - presentation of a proposal

NEW AWARDS PROCEDURES

- SPS Policy 5.7, proposed wording:
  - "TC/SIG's may not nominate an elected member of their own TC/SIG for an award. In addition, current elected members of a TC/SIG may not individually nominate or co-nominate any current elected member of the same TC/SIG for an award through the separate Individual Awards Nomination process."

- 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."

NEW AWARDS PROCEDURES

- 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

NEW AWARDS PROCEDURES

- **We need to decide which of these:**
  1. **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
     - … and if so should a second non-member selection be pursued?
  2. **Exclude all TC-related candidates from the pool of award nominations?**
     - seems rather unfair (and dis-incentivizing) to TC members

- **Regardless of which we select, we are called on to document our process.**

IEEE AWARDS

- **Jack Kilby Award**
  - For outstanding achievements in signal processing (Cliff Carter)
- **James Flanagan**
  - For an outstanding contribution to the advancement of speech and/or audio signal processing.
- **Fourier Award**
  - For an outstanding contribution to the advancement of signal processing, other than in the areas of speech and audio processing. (Georgios Giannakis)
- **Baker Prize**
  - For the most outstanding paper reporting original work in any of the IEEE Transactions, Journals, Magazines, or Proceedings. (Thomas Marzetta, Lee Swindlehurst/Petre Stoica)
- Donald Fink Prize
  - For the most outstanding survey, review, or tutorial paper published in the IEEE Transactions, Journals, Magazines, or in the Proceedings of the IEEE between 1 January and 31 December of the preceding year. (Ali Sayed/Thomas Kailath)

SPS AWARDS

- **Best Paper Award**
  - Cattivelli/Sayed, Herman/Strohmer, Kim/Koh/Lustig/Boyd/Gorinevsky, …)
- **Chapter of the Year Award**
- **Distinguished Lecturer**
- **Education**
- **Meritorious Service**
  - Mathews, Sayed/Ward, Petropulu
- **Overview Paper**
- **SP Letters Best Paper**
  - Zheng/Wong/Paulraj/Ottersten
- **SP Magazine Best Column**
- **SP Magazine Best Paper**
  - Gesbert/Kountouris/Heath/Chae/Salzer, Zhao/Sadler
- **Society Award**
- **Sustained Impact Award**
- **Technical Achievement Award**
- **Young Author Best Paper Award**
  - Razaviyayn/Lyubeznik/Luo, Chi/Scharf/Pezeshki/Calderbank, Needell/Vershynin, …

OLD BUSINESS

- **Associate Members.**
  - What do they get?
  - Perhaps lunch at SAM and/or CAMSAP?

- **Affiliate Members.**
  - SPS wants to encourage these.
  - SPS survey to gather data.
  - Can we ask some of them to participate in reviews?
  - Perhaps draw from attendance list at SAM/CAMSAP?

- **Topical overlap between SAM & CAMSAP?**
  - Is this important?

- **Management of special sessions at SAM & CAMSAP?**
  - Possible (unfair?) extra round of review for invited papers.
  - It would be best to formalize the procedures.

DISCUSSION: VOTING

- TC Review: increase geographical coverage in R10, gender diversity and the number of members from industry/government.
  - In the 2013 election cycle this was given special emphasis. Moreover, starting in the 2014 election cycle we implemented a "two step" election procedure to encourage diversity.
    - Illustration: Assume 12 open slots, and say more than 12 candidates who are neither industrial/lab, female nor Region 10 (nor other under-represented region). The first round of election will winnow that list to 12. The second round of election will include those "surviving" 12, plus the remaining (under-represented category) candidates.
- Class of 2014: 1 new R10, 3 new female and 2 new I/G
  - Class of 2015 results mixed, but gains maintained. There is an additional R10 member as well as one from R7, there is one fewer female TC member, and while we have lost a member from industry we have gained one from government/laboratory affiliation.
- We feel our procedure makes sense, and will monitor its results.
  - may require some fine-tuning.
- Possibly the IEEE **FluidSurveys** tool for anonymized election would be a useful tool for us in the future? (up to the Committee   )

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.

- Also examine Affiliate Member and Student Affiliate Member roles and membership.

SPS INITIATIVES

- **Signal Processing Cup**
  - competition for undergraduates
  - topics suggested by TCs
  - three teams selected and supported to come to ICASSP 2015
  - "Heart Rate Monitoring During Physical Exercise Using Wrist-Type Photoplethysmographic (PPG) Signals" (from BISP-TC)
- **SPS Visibility Initiative**
  - thanks to Rodrigo de Lamare for being our TC rep
  - SPS Video
  - should SAM TC "volunteer" to be a movie subject?
- **Online Content and Social Media**
  - Andres Kwasinski (axkeec@rit.edu)
    - Twitter feeds of news
    - Newsletter committee

SPS INITIATIVES

- **Role of TCs in Conferences**
  - provide input on expected number of papers and expected acceptance rates 5 years out
    - there was considerable discussion about this
  - membership on conference committees
    - original suggestion was all TCs, but quorum (of 12) a problem
    - now at 5 including one on conference executive committee
  - sponsorship of track at GlobalSip
    - original intent of GlobalSip to be a SPIE-like container ship for TC symposia
    - has not worked out that way, not much TC involvement