IEEE Signal Processing Society
Sensor Array and Multichannel (SAM) Technical Committee
Minutes of the ICASSP 2015 Meeting
Brisbane, Australia; April 23, 2015; 13:00-14:30
Brisbane Convention and Exhibition Centre – Plaza Level P6

Present TC Members: Volkan Cevher, Chong-Yung Chi, Jean Pierre Delmas, Maria Sabrina Greco, Martin Haardt (Vice-Chair), Dominic K.C. Ho (Past Chair), Geert Leus, Jian Li, Xavier Mestre, Frederic Pascal, Marius Pesavento, Ali Sayed, Joseph Tabrikian, Peter Willett (Chair), Yimin Zhang.

Guests: André L.F. de Almeida, Waheed Bajua, Petar Djurić, Robert Heath, Usman Khan.

§1. Welcome of New TC Members and Short Introduction
- The chair welcomed the 7 newly-elected SAM TC members Jacob Benesty, Fulvio Gini, Eduard Jorswieck, Frederic Pascal, Brian Sadler, Ba-Ngu Vo, and Yimin Zhang, of whom Frederic Pascal and Yimin Zhang were present at the meeting.

- Moreover, he thanked the outgoing members Olivier Besson, Rick Blum, Anne Ferreol, and Visa Koivunen.

§2. Report from the Chair

§2.1 Awards
- The Chair announced that 2015 was, again, a successful year for award nominations. The following nominations were successful.
  - **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," *IEEE 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.
  - **Distinguished Lecturer**: Visa Koivunen
- Two former SAM-TC member were elected Fellow of the IEEE: Kristine Bell, Biao Chen

§2.2 ICASSP 2015 Submissions

- SAM received 206 paper submissions and 114 were accepted. This corresponds to a 55 % acceptance rate, as the conference organizers have requested.
- Additionally 6 Signal Processing Letters were presented in SAM sessions.
- The papers were distributed to five lecture sessions (6 papers each), seven poster sessions with 12 papers, and one poster session with 6 papers.
- The Chair pointed out that the percentage of SAM paper submissions to ICASSP 2015 (9.1 %) was significantly higher than in previous years, which could have been influenced by a lot of SAM related research activities in Australia.
    - 2015: 212/2322 = 9.1 %
    - 2014: 222/3544 = 6.3 %
    - 2013: 216/3362 = 6.4 %
    - 2012: 171/2615 = 6.5 %

§2.3 SAM TC Status
- Currently, the SAM TC has 40 members. Our only member from industry has retired, 6 members are from government or research labs (versus 4 in 2014 and 3 in 2013) and 34 from academia. As to gender, 5 members are female (versus 7 in 2014 and 3 in 2013). Regarding the regional distribution, 16 members are in Regions 1-6 (USA), 1 member in Region 7 (Canada), 18 members in Region 8 (Europe, Middle East, and Africa), and 5 members in Region 10 (Asia and Pacific). There are no members from Region 9 (Latin America).

§2.4 GlobalSIP 2015

- As we know, the CAMSAP workshop has traditionally been held the middle week of December in odd years.
- In its first two editions, GlobalSIP was held during the first week of December in 2013 (Austin) and in 2014 (Atlanta). However, in 2015 GlobalSIP in Orlando will conflict directly with CAMSAP in Cancun (and with a workshop on speech processing http://www.asru2015.org/).
- This has been raised with SPS with the hopeful suggestion that care be taken in the future (no response yet). The location and date of GlobalSIP 2017 will be decided at the next Publications Board Meeting of the SPS during ICIP in Québec City (September 27 – 30, 2015).
- 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!

§3. Workshop Reports

§3.1 SAM 2014
- Marius Pesavento presented the final report on the excellent SAM 2014 workshop in A Coruna, Spain (http://www.gtec.udc.es/sam2014/).
- In spite of the fact that the SPAWC workshop was held at the same time in Toronto, SAM 2014 has broken a record for the number of submitted papers (211). The acceptance rate for regular papers was 44.3 %. There were 174 participants.
- The SAM 2014 workshop was comprised of 6 plenaries (plenary speakers: Anna Scaglione, Thomas Kailath, Peter Willett, Angel Lozano, Wotao Yin, James H. McClellan), 2 tutorials,

22 poster sessions (12 special poster sessions, 10 regular poster sessions), and a very nice social program. Moreover, there was a student paper competition with 3 awards.

§3.2 CAMSAP 2015
- Petar Djurić presented a report about CAMSAP 2015 to be held in Cancun (http://inspire.rutgers.edu/camsap2015/), Fiesta Americana Grand Coral Hotel, from December 13 – 16, 2015.
- CAMSAP 2015 will include of 2 tutorials, 6 plenaries, and 11 special poster sessions.
- The paper submission deadline is on **June 15, 2015**.

§3.3 SAM 2016
- Martin Haardt presented a report about SAM 2016 (sam2016.cetuc.puc-rio.br) to be held at the Pontifical Catholic University of Rio de Janeiro (PUC-Rio).
- The workshop will take place from July 10 – 13, 2016, about a month before the 2016 Summer Olympic Games when Rio will offer plenty of cultural activities and festivities, which will make SAM 2016 a memorable experience.
- Four plenary speakers have already been confirmed (Stephen P. Boyd, Arye Nehorai, Robert Calderbank, A. Lee Swindlehurst)
- The paper submission deadline is on **January 29, 2016**.

§4. Proposal for CAMSAP 2017
- A proposal for CAMSAP 2017 to be held in Curacao was presented by André de Almeida and Robert Heath.
- Robert Heath was also involved in the organization of the IEEE Communication Theory Workshop (CTW) 2014 that took place in the proposed venue (Marriott Hotel) in Curacao and received really good feedback by the attendees.
- There will be an e-mail vote on this proposal within the next month.

§5. Subcommittees
- In 2014, the subcommittees of the SAM TC had the following members:
  - **Technical Directions** (Blum, Eldar, Li, Petropulu)
  - **Awards** (DeMaio, Leus, Ho)
  - **Nominations and Elections** (Besson, Koivunen, Mestre)
  - **Workshops** (Bugallo, Cevher, Swindlehurst)
  - **Webmaster** (Ghogho)
  - **Newsletter** (Lops, Mecklenbrauker, Pesavento)
  - **Membership** (Delmas, Schniter)
  - **Industry/Government** (Himed, Ferreol, Krout, Samson-See)
  - **Student** (TBA, Larzabal)
- Please note that the retired members will be replaced soon, there will be an email with that included.

§6. New 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 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 need to select one of the following options:
    - 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?
    - 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.

§7. **Discussion Topics**

- The chair provided a summary of the existing IEEE awards and the existing SPS awards.
    - 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, ...
- The SAM TC has considered its membership categories, with special attention to Associate Member list and whether it is of an appropriate size.
  - • Associate Members (currently around 75)
    - ▪ Associate Members are needed to help with ICASSP reviews.
    - ▪ 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.
    - ▪ To make this form of membership in the SAM TC more attractive, we could invite them for lunch at one of our conferences or workshops (SAM and/or CAMSAP)
  - • Affiliate Members
    - ▪ SPS wants to encourage these.
    - ▪ There is an SPS survey to gather data.
    - ▪ Can we ask some of them to participate in reviews?
    - ▪ Perhaps draw from attendance list at SAM/CAMSAP?
- Request from the TC Review 2014:
  - • Increase geographical coverage in all under-represented regions, especially 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 ....)
- 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 representative
    - 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
- **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

§6. Close of the Meeting

- We plan to have the next SAM TC meeting during CAMSAP 2015 in Cancun. Hopefully most of our members will be able to participate in this meeting.

- The meeting was adjourned at 14:30 and all the agenda items were covered.