Minutes of SPCOM-TC Meeting at ICASSP-2013

Wednesday, 29 May 2013, 12:30 - 14:10

In attendance: 21 TC Members, 0 Associate Members, 0 Affiliate Members, 1 other

Zhi-Quan (Tom) Luo, Tim Davidson, CY Chi, Shugguang (Robert) Cui, Min Dong, Kaibin Huang, Joakim Jalden, Eduard Jorswieck, Erik Larsson, Amir Leshem, Roberto Lopez-Valcarce, Xiali Ma, Gerald Matz, Urbashi Mitra, Gesualdo Scutari, Dirk Slock, Zhi (Gerry) Tian, Sergiy Vorobyov, Wei Yu, Rui Zhang, Shengli Zhou

Tarriq Durrani

Apologies: 8 TC Members

Paolo Banelli, Syed Jafar, Geoffrey Li, Matthew McKay, Michael Rabbat, Alejandro Ribeiro, Milica Stojanovic, Wolfgang Utschick,

1. Presentation from Tarriq Durrani

The meeting began with a short presentation from Tarriq Durrani. He encouraged the TC to increase its collaboration with appropriate committees within the IEEE Communications Society, and to focus on the quality of the nominations it puts forward for the Society and IEEE awards. He also highlighted the rather low participation rate in IEEE elections and encouraged members of the TC to participate.

2. Introduction of new members:

Following that presentation, the new members of the TC were then introduced: Min Dong, Kaibin Huang, Syed Jafar, Joakin Jalden, Michael Rabbat, and Shengli Zhou. In addition, Amir Leshem and Zhi (Gerry) Tian were congratulated on their re-election to the TC for a second term.

3. Vote of thanks for retiring members:

There was a formal vote of thanks to the retiring members of the TC: Mats Bengtsson, Huaiyu Dai, Daniel Palomar, Hamid Sadjadpour, Akbar Sayeed and Zhengdao Wang.

4. Minutes of ICASSP'11 Meeting

These minutes were not approved at ICASSP 2012 due to a lack of quorum. At the 2013 meeting, there were only 9 members of the TC who were present for the 2011 meeting. While those members expressed the opinion that the minutes were an accurate reflection of the proceedings of the 2011 meeting, that did not represent quorum, and hence the minutes remain provisional.

5. Minutes of ICASSP'12 Meeting

The minutes of the ICASSP 2012 meeting were distributed prior to the 2013 meeting. At the 2013 meeting there were only 8 members of the TC who were present at the 2012 meeting. While those members expressed the opinion that the minutes were an accurate reflection of the proceedings of the 2012 meeting, that did not represent quorum, and hence the minutes remain provisional.

6. Highlights of the report from the Chair

A separate Report from the Chair that documents the administrative structure of the TC and reports on the status of its activities was distributed prior to the meeting. It is appended to this document. The content of that report was briefly reviewed. In particular, Shugguang (Robert) Cui was congratulated on the receipt of a Best Paper Award, and Erik Larsson was congratulated on the receipt of the Magazine Best Column Award.

7. Subcommittee appointments

It was noted that our subcommittee structure from 2012 remained intact for 2013, with the exception of the person charged with maintaining the TC's web site. A call for expressions of interest in serving in that capacity was made.

8. Observations from the State of the Society Address

To stimulate discussion, the Chair made several observations regarding the State of the Society address. In particular, it was noted that there were plans for SigPort, an arxiv-like online portal that would have a modest fee for submissions in order to be self-supporting.

It was also noted that Technical Committees were being encouraged to consider co-locating their workshops with the new GlobalSIP conference. In our discussions, this idea did not receive a lot of support.

In comparison with other TC's the SPCOM TC is doing well in terms of affiliate membership, but we will need to be vigilant, and to ensure that we do a better job of offering some value to affiliate members.

9. Conferences

The discussion moved on to the TC's conference activities. The following observations were made.

- ICASSP 2013: It was observed that the SPCOM track had received more submissions this year than any year since 2006. This is consistent with ICASSP 2013 being a popular conference, overall. The SPCOM track provided 11.6% of submissions to ICASSP 2013.
- SPAWC 2013, Darmstadt: It was noted that SPAWC 2013 had received more submissions than in recent years. The TPC Chairs tightened the acceptance rate, but due to the large number of submissions, more papers have been accepted than in recent years.
- SPAWC 2014, Toronto (Tim Davidson and Wei Yu): Wei Yu provided a presentation on the progress of the organization of SPAWC 2014. The organizers proposed the dates of 22-25 June 2014. However, Roberto Lopez-Valcarce pointed out that the evening before, the SAM TC had selected overlapping dates for the SAM 2014 conference. He stated that these dates had been chosen to coincide with a festival and would likely be difficult to change. Wei and Tim responded that the dates that they had chosen had been selected so as to coordinate with the North American Information Theory Summer School, which will also be held in Toronto, and to avoid conflicts with major communications conferences, in

this case ICC in Sydney. It was agreed that the organizers would look for alternate dates and that the TC would hold a vote to select the dates for the conference. Wei Yu also opened a debate on how the TC would like the organizing committee to structure the banquet for SPAWC. There was a consensus that a modest banquet arrangement that allowed organizers to maintain a modest registration fee would be preferred. The option of replacing the banquet with a more modest reception also received support if it allowed costs to be controlled.

- SPAWC 2015: A call for expressions of interest in holding SPAWC 2015 was made. The
 planned dates and locations of complementary conferences, notably ICASSP, InfoCom,
 ISIT and ICC, were observed and were used to guide the discussion. The alternative of
 folding SPAWC into GlobalSIP 2015 was not well supported.
- Format of SPAWC: There was some discussion of the "plenaries plus posters" format of SPAWC. In particular, there was discussion as to whether a two-minute presentation should be given for each poster. This was widely discussed, with examples of successful and unsuccessful implementations being provided. In the end, the decision was to be left to the workshop organizers, but the general consensus was that the poster format is meeting the TC's goals for the workshop.

10. Elections

Note was made that the recently approved cap on the number of TC members who can be re-elected was likely to become active this year. Although the vote that approved that measure was close, the TC resolved to implement the cap, with the option to review that at a later date.

There was some discussion on the fact that we have still not elected an industrial member to the TC. The idea of having a quota for industrial members was floated, but did not receive much support. There was a hope that with the re-election cap in place this year, that some industrial members would be elected in the Fall.

11. Paper awards process

The TC discussed how it should respond to the new eligibility criteria for award nominations. In short, a TC cannot nominate one of its own for an award, including paper awards. Anyone can nominate that person through the "public" track, but the TC cannot make the nomination. A question was posed to the TC as to whether TC members should be eliminated from consideration right from the beginning of the process, or whether they should be included in the process and the highest ranking eligible candidate become the TC's nominee, possibly with a group of TC members nominating any TC member who is ranked higher through the public track. The consensus of those at the meeting was for the latter option, but this will be put to a vote in the subsequent revision of the Policies and Procedures.

The TC discussed potential selection methods for the new paper awards (including the Letters Paper Award and the Magazine Best Column award), and methods for selecting a nominee for the Marconi Award (for the IEEE Transactions on Wireless Communications). These included

variants of the current process, and a "conference model". These discussions will be captured in a proposal for changes to the Policies and Procedures over the northern summer.

In this discussion, there was an emphasis on the role that the nature of the nomination letter plays in the discussions at the Awards Board level. The Awards Subcommittee may broaden the pool of nomination letter writers in order to enhance the quality of our nomination letters.

Next, some analysis was performed on how the slate of papers considered in our paper awards process has grown in size over the last few years. It was observed that over the last few years, and in the last year in particular, the scan review process generated a large number of papers to receive the two award-level review. In the 2012 process, the scan review resulted in 23 papers needing to be reviewed. This was deemed to be a rather large number. It was observed that some TC members had suggested that quite a few of their assigned papers move forward, whereas most did not suggest any. After some discussion there was some consensus that each TC member be nominally limited to suggesting at most 2 of the papers on their list to be considered further. (It was expected that the majority of TC members would not recommend that any of the papers under their consideration be moved forward.) It was suggested that if a TC member would like to move more than 2 papers forward, a case would need to be made to the Awards Subcommittee.

There was a discussion of the voting system that we have used in the TC. Our current system is a first past the post, but there are others, including various forms of preferential voting, and the Kemeny-Young system. While arguments were made for the Kemeny-Young system, the consensus was that the simplicity of the current system, perhaps with a refined "run-off" voting scheme, outweighed the advantages of more complicated schemes. Variants of this scheme will be proposed in the revisions to the Policies and Procedures.

12. Report from Meeting of Technical Directions Board

Tim Davidson provided a report of discussions at the Technical Directions Board. The key points were as follows:

The TD board is in discussions to discover whether the community would be interested in formal representation of the SP Society in the IEEE Standards Committee. The consensus of those at the meeting was that the immediate value of this was not clear.

The TD Board spent considerable time discussing the changes in the awards process. Many of the board members were absolutely convinced of the need for the new arrangements for avoiding (the perception of) conflict of interest, although some expressed an opinion that clear, transparent and publicly available procedures for the selection of nominees ought to be able to remove these perceptions. There was an acknowledgement that the processes for handling "public" nominations is evolving.

There was another introduction to the principles that underlie GlobalSIP, and TCs were, once again, encouraged to consider hosting their workshops within GlobalSIP.

There was a request for TCs to contribute to the Society's community building activities, both through events such as the SP Cup and through some "grand challenge" type activities.

13. Upcoming TC Meetings:

It was noted that the upcoming meetings of the TC are:

SPAWC 2013 (16-19 June 2013, Darmstadt, Germany) ICASSP 2014 (4-9 May 2014, Florence, Italy)

14. Close

Following the end of the discussion Wei Yu moved to close the meeting. This was seconded by Sergiy Vorobyov, and the meeting came to a close.

SPCOM-TC Meeting at ICASSP-2013 Report from the Chair

This report is designed to provide a concise summary of the state of the SPCOM Technical Committee. Much of this information has been previously communicated to members of the TC. The goal here is to ensure that this information is appropriately archived.

1. Membership:

At the end of 2012, the following members retired from the TC. On your behalf, it is my pleasure to thank them for their service: Mats Bengtsson, Huaiyu Dai, Daniel Palomar, Hamid Sadjadpour, Akbar Sayeed and Zhengdao Wang

In our elections in the Fall of 2012 the following people were newly elected to the TC: Min Dong, Kaibin Huang, Syed Jafar, Joakim Jalden, Michael Rabbat, Shengli Zhou. On behalf of the TC, I would like to welcome you. We look forward to the perspectives that you will bring to our discussions.

In those elections, the following TC members were re-elected to a second term: Amir Leshem and Zhi (Gerry) Tian. We thank you for your service over the last three years, and we look forward to your contributions in the next three.

Some measures of the diversity of the membership:

- The geographical distribution of the membership for 2013 is: USA 12; Europe 8; Canada 5; Asia 4; Middle East 1
- The TC has 4 female members
- The TC does not have any industrial members.

2. TC Subcommittees

As of the beginning of 2013, the subcommittee structure of the TC was as follows.

- Awards subcommittee: Erik Larsson, Gerald Matz, Tim Davidson, Tom Luo (Chair)
- Nominations and Elections Subcommittee: C.-Y. Chi, Geoffrey Li, Gerald Matz, Milica Stojanovic, Tim Davidson (Chair)
- Industry/Government Subcommittee: Dirk Slock, Erik Larsson, Robert Cui (Chair)
- Newsletter Subcommittee: Paolo Banneli, Roberto Lopez–Valcarce (Chair)
- Education representative: C.-Y. Chi
- Maintenance of SPCOM homepage (Vacant, Tim Davidson standing in)

3. TC Representation

In 2013, the following people are external representatives of the TC:

- Technical Directions Board (Tim Davidson)
- Steering Committee of the IEEE Transactions on Wireless Communications (Robert Heath, U. Texas, Austin)
- IEEE WCL Steering committee (Erik Larsson)
- **4. Outcome of the TC's nominations for Society's Major Awards made in Fall 2012** These nominations are for the 2012 awards, which will be awarded in 2013.

Society Award: no nominee

Technical Achievement Award: Ye (Geoffrey) Li, unsuccessful

Best Paper Award: R. W. Heath, Jr., Tao Wu, Young Hoon Kwon and A. C. K. Soong, for their paper "Multiuser MIMO in Distributed Antenna Systems with Out-of-Cell Interference", IEEE Transactions on Signal Processing, October 2011. *Unsuccessful*

Young Author Best Paper Award: Chao-Cheng Su and Tsung-Hui Chang for their paper, coauthored with Wing-Kin Ma, Chao-Cheng Su, Joakim Jaldén, Tsung-Hui Chang, and Chong-Yung Chi, "The Equivalence of Semidefinite Relaxation MIMO Detectors for Higher-Order QAM", IEEE Journal of Selected Topics in Signal Processing, December 2009. *Unsuccessful*

Magazine Best Paper Award: Walid Saad, Zhu Han, Mérouane Debbah, Are Hjørungnes (dec.), and Tamer Basar for their paper "Coalitional Game Theory for Communication Networks", IEEE Signal Processing Magazine, December 2009. *Unsuccessful*.

Distinguished Lecturer: Sergio Barbarossa and Robert Heath. Both successful

5. Notable Awards

IEEE Fellows: Retiring member Daniel Palomar and continuing member Zhi (Gerry) Tian were elevated to IEEE Fellow on 1 January 2013.

Best Paper Award: Shuguang (Robert) Cui, received a 2012 Signal Processing Society Best Paper Award for his paper with Zhi Quan and Ali Sayed, "Optimal linear cooperation for spectrum sensing in cognitive radio networks", IEEE Journal of Special Topics in Signal Processing, 2008.

Magazine Best Column Award: Erik Larsson received the 2012 Best Column Award for his column "MIMO Detection Methods: How they work", IEEE Signal Processing Magazine, 2009.

Magazine Best Paper Award: A paper that the SPCOM TC had previously nominated in 2010 and 2011 for the Magazine Best Paper Award received the 2012 version of that award: David Gesbert, Marios Kountouris, Robert W. Heath Jr., Chan-Byoung Chae, and Thomas Salzer, "From Single User to Multiuser Communications: Shifting the MIMO Paradigm," IEEE Signal Processing Magazine, September 2007.

6. ICASSP Paper submissions

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# papers submitted to SPCOM TC
ICASSP 2003
                       320
                       360
ICASSP 2004
                       408
ICASSP 2005
ICASSP 2006
                       420
                       380 (174 accepted, or \sim 46\%)
ICASSP 2007
ICASSP 2008
                       283 (150 accepted, or \sim 53\%)
                       293 (133 accepted, or \sim 45\%)
ICASSP 2009
                       297 (142 accepted, or \sim 48\%)
ICASSP 2010
                       355 (168 accepted, or \sim 47\%)
ICASSP 2011
ICASSP 2012
                       219 (115 accepted, or \sim 53\%)
                       382 (200 accepted, or \sim 52%) plus 5 presentations of SPL papers
ICASSP 2013
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There were no joint sessions other TCs in 2013.

7. SPAWC Paper Submissions and Attendance

SPAWC 2011	213 (116 accepted, or ~54%); 137 attendees
SPAWC 2012	171 (119 accepted, or ~70%); 130 attendees
SPAWC 2013	241 (158 accepted, or ~ 65%)

8. Tasks for 2013/2014

May 2013 Call for nomination of candidates for Distinguished Lecturer

31 May Submit TC's nominee(s) for Distinguished Lecturer

June Revise policies and procedures according to ICASSP discussion, and approve

Call for nominations of candidates for best paper, young author, SPL, magazine

and column awards

Scan review process for paper awards

Call for nominations and voting on candidates for IEEE Baker Award and IEEE

Fink Award

1 July Submit TC's nominees for Baker and Fink Awards due

July Paper award review process

1 August Submit responses to Technical Directions Board regarding issues raised at

ICASSP meeting

August Paper award review process, and initial voting

Call for nominations of candidates for Society, Technical Achievement,

Meritorious Service, and Education awards

September Voting for paper and career awards

Call for nomination of candidates for election to the TC

1 October Submit TC's nominees for the Society's major awards.

October Membership election

November Assignment of ICASSP reviews

December Call for nominations of candidates for IEEE Fourier Award

Call for nominations of candidates for Marconi Paper Award

Mid. Jan. 2014 ICASSP reviews due

31 Jan. 2014 Submit TC's nominee for IEEE Fourier Award

15 Feb 2014 Submit TC's nominee for Marconi Paper Award

March 2014 SPAWC reviews

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