# IEEE Signal Processing Society Sensor Array and Multichannel (SAM) Technical Committee Draft Minutes of the ICASSP'08 Meeting Las Vegas, Wednesday, April 2, 11:30-13:00, Room Naples Prepared by Kristine Bell, Vice-Chair

**TC Members Present (23):** Kristine Bell, Doug Cochran, Hongya Ge, Alex Gershman, Fulvio Gini, Dominic Ho, Andreas Jakobsson, Erik Larsson, Hongbin Li, Hagit Messer-Yaron, Randy Moses, Raghuveer Rao, Brian Sadler, Chong Meng Samson See, Shahram Shahbazpanahi, Nikos Sidiropoulos, Ananthram Swami, Lang Tong, Alle-Jan van der Veen, Luc Vandendorpe, Mats Viberg, Sergiy Vorobyov, Peter Willett.

TC Members Absent (9): Biao Chen, Aleksandar Dogandzic, Dan Fuhrmann, Ivars Kirsteins, Jian Li, Arye Nehorai, Muralidhar Rangaswamy, Xiang-Gen Xia, Abdelhak Zoubir.

Associate Members Present (2): Martin Haardt, Kon Max Wong.

**I. Call to Order:** The meeting was called to order at approximately 12:00 pm. A quorum was present.

#### **II. New Business**

#### 1. **Welcoming the new TC members** [Alex Gershman]

Our new members are Andreas Jakobsson, Randy Moses, Arye Nehorai, Raghuveer Rao, Chong Meng Sampson See, Shahram Shahbazpanahi, and Ananthram Swami. Re-elected members are Fulvio Gini, Jian Li, Muralidhar Rangaswamy, Lang Tong, and Alle-Jan van der Veen. We thank our retiring members Ed Baranoski, Olivier Besson (continuing as Associate Member), Pierre Comon, Yingbo Hua (continuing as Associate Member), Christ Richmond (continuing as Associate Member), Michael Wicks, and K. Max Wong (continuing as Associate Member).

#### 2. **ICASSP'08 report** [Alex Gershman]

This year SAM had 202 submissions and 93 accepted (46%). The papers were organized into seven poster sessions and four lecture sessions including two joint lecture sessions with SPCOMM on MIMO and Sensor Networks.

#### 3. **CAMSAP'07 report** [Raghuveer Rao] – attached

Nikos Sidiropoulos noted that the quality of CAMSAP '07 was high due to the special invited sessions. Mats Viberg noted that we will need to increase the number of contributed papers to ensure the survival of the workshop.

#### 4. Discussion of the next CAMSAP workshop

Alex Gershman announced that Yonina Eldar & Daniel Palomar have indicated interest in organizing the next CAMSAP, possibly in the Dominican Republic. Suggestions were put forth from various TC members to increase participation, including forming an advisory board with past chairs that can help with inviting papers, coordinating with other workshops held in December (e.g. CDC), and increased publicity.

#### 5. **SAM 08 Workshop progress report** [Alex Gershman]

SAM 08 had 186 submitted and 118 accepted papers (63%). We have about \$14K in sponsorship from the U.S. Army Research Lab (Brian Sadler) and some European companies. Additionally, Rabi Madan at the U.S. Office of Naval Research is expected to provide \$5K. This will help lower registration fees. Registration fees are expected to be 350€with another 90€for the banquet. The hotel registration costs are expected to be 89€for a standard room and 100€for a superior room.

Kristine Bell suggested including the banquet fee with the registration fee. This will increase banquet participation, and is easier for participants to receive travel reimbursement. There was general agreement among the committee. Additional discussion on the banquet established that the banquet fee will not be included for students, but tickets will be available for purchase by students, spouses, etc.

#### 6. Discussion of the need for formal SAM TC policies and procedures, and bylaws.

[Alex Gershman and Kristine Bell] In preparation for our upcoming review by the Signal Processing Society, we need to have a formal Bylaws document, and an informal (but written) Policies and Procedures document. Bylaws are fairly straightforward and cover things like Membership, Management, Elections, and Meetings. We have several examples from other TCs. Policies and Procedures cover things like awards. Having a written document ensures continuity and fairness. We need to gather the information about our practices and put it in writing.

Nikos Sidiropoulos, as chair of the SPCOM TC, just completed this process for SPCOM. It was decided that there is no need for a sub-committee and that Kristine Bell, as Vice-chair, will draft the Bylaws and Policies and Procedures for SAM using SPCOM and other TC's documents as guidelines, modified to reflect our practices. We will discuss and modify by email.

### 7. Discussion of the need to revise the procedure for nominating papers for the Best Paper and Young Author Best paper awards.

[Alex Gershman and Kristine Bell] The current SAM procedure is as follows. The vice-chair solicits nominations, which are sent confidentially by email to the chair and vice-chair. Once all nominations are received, the group of nominations are presented to the TC and voted on. The winning paper is sent to the Awards Board. The advantages of this procedure are that papers are nominated only if they have attracted a TC member's attention and that TC member does the work in putting the nomination together, and the full TC only has to consider a few papers (this year 3). The disadvantage is that all eligible papers are not considered, and we may be failing to recognize some excellent papers.

[Nikos Sidiropoulos] SPCOM uses the following procedure

- Vice-Chair compiles a list of eligible papers from past year from SPS journals by looking at titles. This results in about 180 papers per year.
- Eligible paper nominations are also solicited from Associate Editors and the TC website.
- The vice-chair manually trims the irrelevant papers, resulting in about 140 papers.
- Papers are distributed among committee members for a high level review (one review per paper, 4-5 papers per TC member).
- A list of finalists is put together by the chair.

- Three detailed reviews of each finalist paper are obtained from the TC.
- The finalists are augmented by top papers from previous years, for a total of about 20-25 Best Papers, and about 15 Young Author Best Papers.

Advantages of this procedure are that every eligible paper is considered. Disadvantages are the workload for the TC members and vice-chair, and that no one person is responsible for the nomination, which then usually falls to the vice-chair to put together.

The committee was asked to vote on the need to revise our current procedures. The committee unanimously voted to revise our procedure.

After much discussion, the following procedure was agreed upon:

- Five to ten subcommittees representing the main topics within SAM's field of interest will be formed. The committees will have 3-6 members.
- Each subcommittee will come up with a list of eligible papers for their area by scanning the SPS journals.
- Each sub committee will review their papers and come up with one nomination. This may be done in two rounds: high level review to eliminate non-competitive papers, followed by detailed review of a few papers. The nomination/review will include strengths and weaknesses.
- The full TC will vote on the finalists.
- The winner will be sent to the Awards Board. A nomination statement will need to be made (strengths only).

It was emphasized that no procedure is perfect, and that this is just a starting point that ensures broader consideration of papers but is not overly burdensome on the TC members.

Details will need to be worked out and will be discussed via email.

- 8. **Forthcoming SAM TC review at ICASSP 2009.** [Alex Gershman and Kristine Bell] The SAM TC will be reviewed next year by the SPS. We have to fill out a detailed report and will be requesting historical information from committee members in order to prepare the report. Other than needing Bylaws and Policies/Procedures, our TC is in good shape for the review.
- 9. **Discussion of a proposal for changes in the technical program of ICASSP 2009** [Alex Gershman] attached.

Reactions were mixed and there weren't any strong opinions. More structure and combining programs across TCs means more work for the Chair and Vice-Chair. It's not clear that organization into topic symposia will make ICASSP more focused, or that this is needed. Some members indicated the desire for more plenary talks.

#### 10. Liason/spokesperson from the SAM TC to E-news.

It was decided that this will be Kristine Bell for this year, and the Chair or Vice-Chair in general. This is a way to share TC news with all society members.

#### Summary Report on the Second IEEE Workshop on Computational Advances in Multi-Sensor Adaptive Processing

Prepared by Raghuveer Rao General Co-Chair 02-April-2008

Organizing Committee: Raghuveer Rao (General co-chair), Nikos Sidiropoulos (General co-chair), Mats Viberg (Technical co-chair), Yonina Eldar (Technical co-chair), Mats Bengtsson (Publications chair), Sohail Dianat (Finance and registration), Marc Boumedine (Local arrangements).

The workshop was held at the Wyndham Sugar Bay Resort in St. Thomas, US Virgin Islands from December 12 to 14, 2007. It drew 86 participants. A total of 85 papers were submitted out of which 47 were invited for special sessions. A total of 78 papers were accepted and presented at the conference except for one reported no-show. There were 10 special sessions and six plenary talks dealing with the topics of iteratively expanding subspaces (Louis Scharf), distributed estimation (Georgios Giannakis), optimization-boosted beamforming (Alex Gershman), compressive signal processing (Richard Baraniuk), biomedical image reconstruction (Michael Unser), and game theory and network optimization (Asu Ozdaglar). There was a panel discussion on key computational issues for the coming decade. We received local support from the University of the Virgin Islands for audiovisual equipment. The ONR provided a grant of 5400 USD. This has been used for publication cost and for travel support to 13 students to the tune of 250 USD each, which was the IEEE student registration rate. Thanks to several on site registrations, the workshop ended in the black with a healthy surplus as shown in the Table.

Table 1: Income and Expense

Income	\$ 32,690.00
Expense	\$ 28,433.00
Surplus	\$ 4, 257.00

#### ICASSP 2009 Technical Program Plan

#### 1.0 Basic Idea

By "Technical Program" we mean all programs that are technical, including Plenary Sessions, Special Sessions, Tutorials, and the Regular Sessions organized by the Technical Committees (TCs) from the open-call submissions. All these programs are usually organized by different groups of people. Although very good individually, they more or less appear together as a "random collection of nice pieces". We hope to do it slightly differently in 2009 to organize the "Technical Program" as a whole with a better structure: Plenary and Special Sessions as the highlights, Tutorials as the infrastructure, Regular Sessions as the body, and different types of sessions with some common technical emphases linked vertically into "Thematic Symposia" as the focuses of the conference.

#### 2.0 "Overview Talk Sessions"—A New Form of Special Sessions

ICASSP includes diversified disciplines, and the concepts and methodologies of different disciplines are certainly helpful to research work in each area. Interdisciplinary areas also usually imply extra opportunities and challenges. But the current form of ICASSP programs makes it difficult for researchers to learn something new from areas he is not working on. This leads to the idea of "Overview Talk Sessions" to be a second form of special sessions. The target audience of the "Overview Talks" will be roughly 1/6-1/2 of the participants. It will be actually some kind of "Plenary Talks for a specific area, but not for the whole ICASSP". They will be allocated in the same room as the Plenary Talks. When an "Overview Talk" is allocated in a time slot, we try not to put other sessions in the same area in the same time slot, so all people in that area can listen to that talk, plus some people in other areas wishing to learn more. It should cover wider scope, important directions or methodologies useful to many people. Plenary Talks, on the other hand, remain to be for all participants of ICASSP, should be interesting to all participants. Tutorials, on the other hand, have more focused topics and are targeted to much smaller size of audience.

#### 2.1 Scheduling with "Overview Talks"

A time slot of 6 oral papers (there is 3 such time slots everyday) can be used to give 3 overview talks, each with length of 40 min. So an Overview Talk is synchronized with 2 regular oral talks. In the first time slot in the afternoon everyday we schedule a "Overview Talk Session". For a 4-day program we then have 4 such Special Sessions, or 12 Overview Talks. For these time slots the other oral sessions should be reduced to minimum to avoid conflicts, but poster sessions will remain unchanged. In order not to change the current number of Regular Sessions, this means more oral sessions will have to be squeezed into the other 8 time slots and become parallel with other sessions. The "Conventional Special Sessions" (those "Special Sessions" we currently have in ICASSPs) may co-exist with "Overview Talk Sessions" to have 12 "Conventional Special Sessions" as usual. But these "Conventional Special Sessions" need to have much stronger justifications than they have now, and they will be selected much more carefully. As a result, we may not need 12 of them, and we may create the slots for the Overview Talks in this way. The scheduling of all the sessions (Special Sessions and Regular Sessions) will be challenging but doable to reduce the possible conflicts to the minimum.

#### 2.2 Video/Audio Recording of Special Sessions

The conflicts among different sessions that people cannot listen to all talks they wish to listen to is always a problem. We plan to video/audio record the "Conventional Special Sessions" and "Overview Talk Sessions" (with the agreement of the speakers), and make them available via networks to conference registrants with authorized passwords 2 hrs after the talk until 3 weeks after the conference. After that these video/audio tapes will be available as a form of education packages to be managed by IEEE SPS.

## 3.0 "Thematic Symposium"—A Vertical Link of Sessions of Different Types Carrying Some Common Technical Emphasis

With the Plenary, Special, Regular Sessions and Tutorials, we can "structure" the Technical Program as a whole by identifying some common technical emphases of some sessions of different types, and putting them together, referred to as "Thematic Symposia". A "Thematic Symposium" may include, for example, a Plenary Session, one or few "Conventional Special Sessions", one or few Overview Talks, a Panel, several

Regular Sessions, and one or few Tutorials, or something similar, which have a common technical emphasis. The common technical emphasis may be interdisciplinary across several TCs, for example "signal processing under Internet environment", "interdisciplinary areas of signal processing", or within a single TC, for example "multimedia semantics for Web 2.0", "new directions in ubiquitous spoken language processing", etc.. They can have a either broader or narrower scope. So a "Thematic Symposium" is a vertical link of several sessions of different types, but carrying some common technical emphasis, which then naturally becomes one focus of the conference. The Plenary, Special and Regular Sessions of a Thematic Symposium thus respectively serve as the highlights and body of the Thematic Symposium, while its Tutorials as the infrastructure. All sessions of different types of a Thematic Symposium (except the Tutorials) may be scheduled within one or two days, within the 4 days of the normal conference period, except arranged in a better sequence as a compact track, for example one in the first day and another in the second day, so people may learn something new more efficiently and smoothly. So the Thematic Symposia are just parts of the normal conference program. This is depicted in Figure 1. The Thematic Symposia will have their

	Thematic Symposium (I)	Thematic Symposium (1 )	Thematic Symposium (1 )	
Plenary Sessions				
Special Sessions  Conventional Special Sessions Overview Talk Sessions Panels				
Regular Sessions				
Tutorials				

Figure 1 The overall structure of the proposed Technical Program of ICASSP 2009: several Thematic Symposia plus normal programs, where the Thematic Symposia carry the focuses of the conference

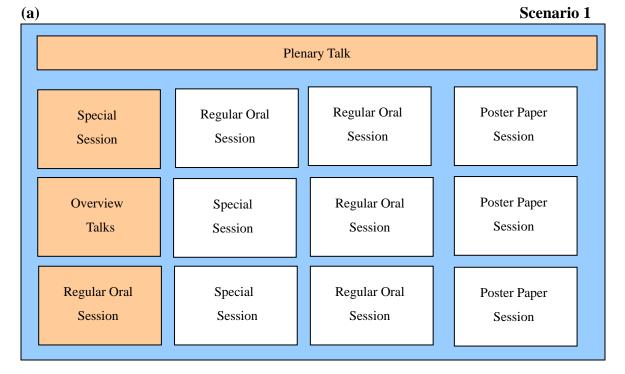
own titles, shown on the "Program at a Glance" with different colors so they are much more visible. The whole ICASSP may have several Thematic Symposia carrying the focuses of the conference. In this way, the ICASSP will be "several Thematic Symposia plus normal programs". All existing session structures and programs and acceptance ratio of open-call submissions remain unchanged. Those not included in the Thematic Symposia are simply the normal programs. Two example scenarios of arranging one-day Thematic Symposia are shown in Figure 2 (a) and (b). Of course they can also be 1.5-day or two-day long.

#### 4.0 The Role of Technical Committees (TCs)

The TCs know the technical emphases of their areas the best. They are invited to propose Plenary/Special Sessions and Tutorials, and are responsible for organizing Regular Sessions. So the TCs are also invited to submit proposals for Thematic Symposia, indicating in proposals the possible components (Plenary/Special Sessions, Tutorials, as well as possible Regular Sessions), together with the proposals of the component Plenary/Special Sessions and Tutorials. The Plenary/Special Sessions and Tutorials will have higher priority to be selected if in the context of an attractive Thematic Symposium proposal submitted by one or more TCs. Of course, those TCs not submitting proposals for Thematic Symposia can still submit proposals of individual Plenary/Special Sessions and Tutorials, but with slightly lower priority. Proposals for Special Sessions or Tutorials can also be submitted by individuals from the open-call, but with even lower priority. So TCs are encouraged to play active roles.

In other words, the TCs are encouraged to consider the concept of Thematic Symposia from a top-down view, starting with the technical emphases in their areas, from which the Plenary/Special Sessions, Tutorial proposals and Regular Sessions are considered, respectively in different types serving different purposes. The proposals of Thematic Symposia can be submitted by either a single TC, or more than one TCs jointly. A well structured Thematic Symposium proposal may even include its own chair/co-chair if so wish, who are the people carrying the overall responsibility in organizing the Thematic Symposium. We do wish to give the organizers of Thematic Symposia (the chair/co-chair or the TC) more freedom in organizing the Symposia. For example, they can organize a trade-show and bring in more industry practitioners if they wish. The Thematic Symposia also serve as the flagship programs of TCs in ICASSP 2009. TCs with Thematic

Symposium proposals accepted will have their Thematic Symposia as the focuses of the



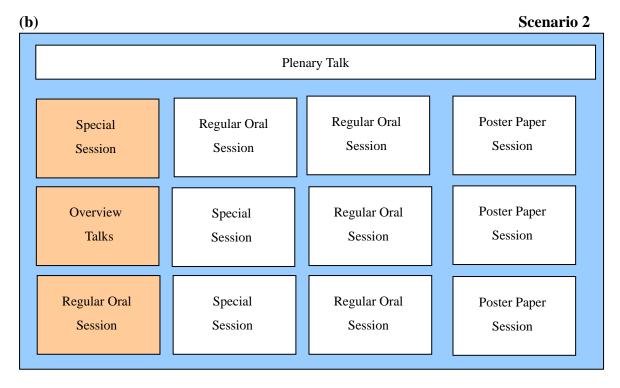


Figure 2 Two scenarios of arranging one-day Thematic Symposia, (a) including a plenary talk which is part of the Thematic Symposium highlighting the theme and (b) not including a plenary talk, in which case the plenary talk is not directly related to the theme of the Thematic

#### Symposium.

conference, will be more visible, will have more time slots of Plenary/Special Sessions/Tutorials (honorarium will be offered to Overview Talk speakers), and so on. These are good for TCs.