IEEE Information Theory Society Board of Governors meeting minutes

Global Meet web meeting, 09.20.2014, 7 AM - 9:30 AM Pacific Time Edmund Yeh

Present: Abbas El Gamal, Alex Dimakis, Alex Vardy, Alon Orlitsky, Andrew Barron, Aylin Yener, Elza Erkip, Frank Kschischang, Michael Honig, Michelle Effros, Paul Siegel, Ruediger Urbanke, Tracey Ho, Vijay Kumar, Edmund Yeh, Urbashi Mitra, Gerhard Kramer, Matthieu Bloch, Raymond Yeung, Suhas Diggavi, Sergio Verdu, Pierre Moulin, David Tse, Muriel Medard.

After resolving some technical issues, the meeting was called to order at 7:30 AM Pacific Time by Information Theory Society (ITSoc) President, Abbas El Gamal.

1. Motion: Vote to approve the meeting agenda. Motion was passed.

2. Abbas presented the President's Report. Abbas reviewed the main work items for the BoG for 2014. Abbas first noted that the final report of the Committee on New Directions (chaired by Jeff Andrews), which was presented to the BoG by Muriel Medard at the ISIT 2014 BoG meeting, will be published. To manage the increasing size of the Transactions, the BoG has passed a motion to allow for peer-reviewed online-only supplementary material to be posted together on Xplore with each IT Transactions paper. Implementation details have been worked out based on the recommendations of an ad hoc committee chaired by Frank Kschischang and based on a vote by the BoG at the ISIT 2014 meeting. The issue of establishing a more robust editorial board needs to be further explored. With regards to declining Society membership, the BoG has already approved differentiated fees for conferences, workshops, and schools (in favor of Society members). Alon has been exploring various avenues for addressing the membership decline. Efforts have been undertaken to improve visibility into IEEE finances. Relevant discussions are ongoing within the IEEE TAB meetings.

Abbas then discussed possible administrative support for the society. The main question is whether the Society should hire a 50% time administrator who would serve a role similar to that of the current administrator for the EiC, and who could provide administrative continuity. Abbas outlined the tasks that the administrator would be expected to fulfill. These include (a) developing and managing the master calendar for BoG, officer, and EiC activities, (b) archiving important information and serving as institutional memory, (c) scheduling all committee meetings, organizing BoG lunches and the Awards Brochure, (d) supporting the Secretary on the preparation of plaques and certificates, (e) helping with the preparation of conference and school proposals and with some of the conference organization, (f) helping with marketing, outreach, mentoring, and WITHITS events, (g) providing an interface with various IEEE administrative functions, (h) preparing various statistics on membership, etc., (i) interfacing with chapter chairs, (j) keeping the Society webpage up to date. In terms of next steps, Abbas suggested that we check with other societies on their experience regarding administrative support. One question is whether the support person would be hired through IEEE or as an outside contractor. A BoG discussion and vote on this issue is needed. If there is agreement to proceed, we need to establish a small hiring committee which would work with the IEEE on identifying a good candidate.

Abbas then discussed the Shannon Centennial in 2016. How should the Society celebrate the Centennial? What can the Society do to elevate the public's awareness of Shannon's contributions and impact? One major idea is the campaign, headed by Michelle Effros, for a Shannon commemorative stamp by the U.S. Postal Service.

3. Aylin Yener presented the Treasurer's Report. Aylin first recalled lessons from the 2013 initiatives.

There is no reason not to have initiatives if the money is there. In fact this appears to be the only way to meaningfully spend the surplus we make as a society. Furthermore, the reserves are not easy to tap into. For 2014, using the 50% rule, we have \$55k for initiatives. Support for three new schools in 2014 has been set at: East Asian School (\$20k), India School (\$10k) and Australia School (\$15k). These are set up as initiatives. There is room to support more initiatives in 2014.

Aylin moved on to the 2015 budget, which has been finalized. The first version was prepared by the June BoG meeting, projecting an \$85k surplus. The second version was prepared in August. The good news is that there is now a projected increase of \$40k on our publication revenue (most of it from Transactions, about \$8k from conference papers). Thus, our new projected surplus is \$125k. This means that we should not have any problem supporting the new Schools.

In 2015, support for various outreach activities total \$98k. The Student Subcommittee will receive \$10k; Outreach and WITHITS will receive \$3k each (with a possible increase to \$5k each). The North American and European Schools will receive \$20k each (already approved at the BoG meeting in Honolulu). It is proposed that the East Asian and India Schools receive \$15k and \$11.5k, respectively.

4. Elza Erkip presented the Conference Committee Report. Elza first discussed ISIT 2017 in Aachen, Germany. The new dates June 25-30 have been proposed and it was asked whether this led to any conflicts. None were mentioned during the meeting. Elza then discussed ISIT 2018, for which a number of possible locations have been mentioned, including Chicago (Wojciech Szpankowski and Bob Brown), Colorado (Rockey Luo), and Paris (Pablo Piantanida).

Elza moved to ITW 2015 in Korea. The workshop will have an advanced registration fee of \$660 for ITSoc members, and \$330 for students. A surplus of more than 10% is expected. A loan of \$10k is requested by the workshop. The conference committee recommends BoG approval of the budget and requested loan.

Aylin mentioned that we can decrease the registration fee by finding some industry support. She also indicated that we should have separate votes on approving the budget and loan.

Motion: To approve a loan of \$10,000 for ITW 2015 in Korea. Motion was passed via an email vote which took place September 20-27, 2014.

Elza moved to ITW 2015 in Jerusalem. After a recent update of the budget, the conference organizers (Steinberg, Zamir, Ziv) have requested a 25% increase in the registration fees, which are set at \$750 for ITSoc members and \$300 for students. The main reasons for the fee increase include professional conference organizer costs, inclusion of VAT, banquet costs, and credit card fees. The organizers have sent a detailed letter, along with the old and new budgets, which are available. Due to added costs, the student support had to be taken out of the budget. The surplus is expected to be 10%.

A discussion followed. It was mentioned that a \$750 registration fee is high. It was suggested that the organizers try to get industry funding to support student travel. It was also suggested that differentiated registration fees be adopted (in favor of ITSoc members).

Elza next discussed ITW 2016 in Cambridge, UK. During the discussion at ISIT 2014, it was suggested that the workshop could be held over a weekend, in order to facilitate attendance from overseas during the start of the fall semester. Due to conflicts with the schedules of the plenary speakers, however, the organizers recommend keeping the original dates of September 12-14.

Next, Elza moved to discuss technical co-sponsorship of CISS 2015. ITSoc has provided technical co-

sponsorship for CISS since 2006. Conference committee recommends BoG approval. Concerns were expressed regarding the lack of a formal review process for CISS papers, which are published on Xplore. It was suggested that rules be developed regarding ITSoc technical co-sponsorship of conferences.

Motion: To approve technical co-sponsorship for CISS 2015. Motion was passed via an email vote which took place September 20-27, 2014.

Technical co-sponsorship of NetCod 2015 is also proposed. ITSoc has provided technical co-sponsorship for NetCod since 2008. Conference committee recommends BoG approval. Next, Technical co-sponsorship of the 2015 IEEE International Radar Conference is proposed. Elza mentioned that the radar community is interested in developing fundamental bounds and ITSoc members are becoming active in the radar area. Conference committee recommends BoG approval.

Motion: To approve technical co-sponsorship for NetCod 2015. Motion was passed via an email vote which took place September 20-27, 2014.

Motion: To approve technical co-sponsorship for the 2015 IEEE International Radar Conference. Motion was passed via an email vote which took place September 20-27, 2014.

Elza moved to discuss ISIT 2015 in Hong Kong, chaired by David Tse and Raymond Yeung. The conference organizers have proposed a new semi-plenary session format for ISIT 2015. This was reported to the Conference Committee and the BoG at the ITA 2014 meeting, but details were not available at that time. A detailed proposal has now been presented, and feedback on the proposal is sought. The conference committee is in favor of adopting the new semi-plenary session format. The conference organizers also propose developing a smartphone app for the conference. This would cost about \$5-6k and would be added to the conference budget. One question is whether the app would be rented or developed. It is suggested that we investigate what other societies do for such apps.

David Tse gave a detailed explanation of the proposed semi-plenary session format for ISIT 2015. The semi-plenary sessions will be dual track, occupying the 9:50 - 11:10 AM time slots on Monday, Tuesday, Thursday and Friday. Each talk will be 20 minutes long and will be selected from the submitted papers. One of the main aims of the semi-plenary sessions is to highlight works that explore new directions, present new ideas, make interesting connections, and broaden the boundaries of the field. As an auxillary goal, the semi-plenary sessions can also be used to showcase papers that contain results that are deserving of exposure to a broader audience, such as papers that solve important problems. The short list of best student papers can also be presented in the semi-plenary sessions so that they get more attention from the community. The semi-plenary session format is an experiment proposed for ISIT 2015 only. The conference will conduct an exit survey of how people feel about the experiment when the conference ends. The semi-plenary session format will not significantly change the total number of papers presented at the conference. To compensate for the reduction in the number of papers due to having only 2 tracks in the semi-plenary sessions, the conference will increase the number of parallel tracks in the other sessions from 9 to 10.

The conference plans to have a panel of dedicated members from the TPC who will select from the accepted papers (after the decision process) using inputs from other TPC members, as well as the reviews obtained. Additional opinion will be solicited as needed. To facilitate this process, the review form will include specific questions for the reviewers and the TPC member handling the paper regarding the appropriateness of a paper for the semi-plenary sessions. As there is input from the reviewers, TPC members, and the panel, there are three levels of scrutiny on the papers to ensure that the selection process is fair. In addition,

5 extra pages have been allocated in the submission (to be read at the discretion of the reviewers/TPC members) so that the authors can add details that they could not fit into the main paper.

A discussion followed. Enthusiasm regarding the proposal was expressed. The Conference Committee expressed its support for this one-time change. On the other hand, it was noted that there was negative feedback on the proposal as well. Specifically, there was concern that with the new semi-plenary format, there will effectively be two tiers of papers at ISIT, with the semi-plenary papers being regarded as "more valuable." There was concern that the change of format is radical for ISIT, which has maintained the same format for many years. There was skepticism expressed on the ability to judge which papers will be worthy of the semi-plenary sessions. It was noted that the criteria for choosing the semi-plenary papers may vary with conference organization, and therefore the change will introduce a new element of variability to ISIT. It was noted that many years ago, ISIT had long papers and short papers, with the selection of the long papers (which were in regular sessions) being a complicated process. It was suggested that papers by TPC members be excluded from consideration for the semi-plenary sessions, and that papers which have already appeared elsewhere not be considered. In addition, there was concern that 10 parallel sessions may be too much, putting added strain on conference facilities. For instance, 10 parallel sessions cannot be accommodated at ISIT 2016. It was noted that we need to ensure that conference format changes are sustainable for the long term.

On the other hand, it was noted that the new format creates an incentive for researchers to submit papers exploring new directions. The existence of the forum indicates that exploration of new directions is rewarded. The ISIT format has not changed in 20 years, and perhaps it is time for some experimentation. Since the IT Society is currently exploring new directions (cf. the Report of the Committee on New Directions), this may be a good time to experiment. It was also reiterated that papers containing significant contributions in well-established areas would also be considered for the semi-plenary sessions.

Questions were raised on how to establish the criterion for judging whether a paper leads to a new direction, or whether the paper represents a significant enough contribution to a well-established area. The process may involve too much value judgment, and lead to a highly imperfect system. With the new system, there may be an implication that papers which are not selected for the semi-plenary sessions, are not significant or path-breaking enough.

It was suggested that perhaps the semi-plenary sessions should be restricted to papers presenting new directions. On the other hand, it was noted that there is not much mass in those new areas yet, and perhaps the new sessions are therefore not warranted. It was also suggested that perhaps there should be an adaptive process by which the length and frequency of the semi-plenary sessions can be determined based on the paper submissions. It is noted that this can be accomplished by adjusting the first session in the morning, e.g. with fewer parallel sessions.

In summary, the discussion points to an adaptive process for determining the number of semi-plenary sessions. The sessions could include papers leading to new directions, containing significant results in well-established areas, and student papers nominated for best paper. One possibility is to restrict the sessions to include only papers leading to new directions. It was suggested that the TPC be given leeway to implement the new system.

The ISIT 2015 conference organizers would like to see an advisory vote from the BoG for feedback on the semi-plenary proposal. It was suggested that the positions be summarized before an advisory vote is taken. The Conference Committee will confer further with the conference organizers.

5. Matthieu Bloch presented the Online Committee Report. Matthieu presented a brief overview of the media resources available on itsoc.org. The resources are operational on the development server. Reencoding of some videos is in progress, and there are still some minor technical details to figure out. With respect to IEEE.tv, the Committee is still waiting for official feedback. A test channel is available at https://ieeetv.ieee.org/player/html/viewer?channel=information-theory. There is still a need to test the embedding of the channel in the website.

With respect to Pareja, Matthieu pointed out that the last backup was archived by the Online Committee. September should be the last month of hosting with web.com. On Social Media, an experimental Facebook page has been set up at https://www.facebook.com/pages/IEEEInformation-Theory-Society/339934289488983. Further experimentation will take place before the page is advertised publicly. The Online Committee is currently in the process of moving various media resources to the ITSoc website. These include ISITs (2006 and later), Schools, ITWs, student events, WITHITS. The moving process will take about 3-6 months. Video re-encoding is currently in progress.

6. Aylin Yener presented the Schools Committee Report. Aylin first discussed the 2014 Schools. For the North American School (NASIT), the books have not yet closed. An NSF grant provided support for 15 US-based students. The reimbursements are ongoing. The books are expected to close by the end of the year. For the European School (ESIT), Vitaly is working with IEEE on closing the books. This was complete as of the end of August. There is a surplus of 2515.39 EUR. The Australian School of Information Theory will take place November 10-13, 2014.

Aylin moved on to the 2015 Indian School. The School Committee requested that the proposal be revised to have the speaker honorarium be either removed or paid by non-society funds. The organizers have agreed. The revised proposal is uploaded for BoG review. The School will take place over four days and feature two topics. Each day will have two hours of lecture, followed by one hour of discussion (which includes student research presentations). Speakers and topics include: Gerhard Kramer (multiterminal communication theory) and Yihong Wu (high dimensional statistics). The School will take place at IISc Bangalore during the May/June/July time frame, depending on anticipated local climate conditions, conference schedules and speaker availability. The organizing committee includes Srikrishna Bhashyam, Radhakrishna Ganti, Krishna Jagannathan, Andrew Thangaraj (IIT Madras), Rajesh Sundaresan, Navin Kashyap (IISc), Vinod Prabhakaran (TIFR Mumbai), Sibiraj Bhaskaran Pillai (IIT Bombay). The estimated budget is \$17k. The School seeks IT Society support of \$11.5k.

Motion: To approve funding at \$11.5k for the 2015 Indian School of Information Theory. Motion was passed via an email vote which took place September 20-27, 2014.

Aylin reviewed the 2014 East Asian School (EASIT) on behalf of Sid Jaggi. The School took place July 7-11, 2014, at the Chinese University of Hong Kong. There were 62 participants from the East Asian region. Speakers included David Tse, Alon Orlitsky, Ruediger Urbanke, Yasutada Oohama and Chandra Nair. The School budget and expenses were summarized. The School received a \$20k grant from IT Society.

Aylin then presented the proposal for the 2015 EASIT, scheduled to take place at the Chinese University of Hong Kong June 8-12, the week before ISIT 2015. The organizing committee includes Sidharth Jaggi, Chandra Nair (CUHK), Ryutaroh Matsumoto (TITech), Sae-Young Chung (KAIST), Vincent Tan (NUS), Mehul Motani (NUS), Hsuan-Jung Su (NTU), Ning Cai (Xidian University), Wei Kang (SEU). Topics and speakers include Raymond Yeung, Terence Chan, Frederique Oggier, Navin Kashyap (network coding), Matsumoto, Frederique Oggier Navin Kashyap, Andrew Thangaraj (information-theoretic security), Kingo Kobayashi, Matsumoto, Mehul Motani, Sergio Verdu (Multi-terminal information theory), Emre Telatar, RobCalderbank, Pascal Vontobel (coding theory). The estimated budget is \$21k. The School seeks IT Society support of \$15k.

Aylin pointed out that the organizers are hoping for higher attendance and cheaper costs (most speakers will be attending ISIT anyway). The organizers have applied for external funding from the Croucher Education Foundation, and expects to hear in December. If the School receives the Croucher funding, it will not need ITSoc support (at least not all of it), and may go with a more ambitious program.

Motion: To approve funding at \$15k for the 2015 East Asian School of Information Theory. Motion was passed via an email vote which took place September 20-27, 2014.

7. Alon Orlitsky presented the Membership Committee Report. Alon mentioned continued discussions on new chapters in Brazil, China, India, Italy, as well as Arizona in the U.S. Alon emphasized the importance of enhancing chapter activities, in order to support schools as well as the DL program. Emails have been sent to IEEE Vehicular Technology Society members who might be interested in joining IT Society at a discounted rate. The response has been modest. The Committee is currently trying to get permission to send emails to other IEEE societies. Going forward, more chapter discussions and emails are needed. Also, results from differentiated registration fees at conferences and schools should be reviewed. For the Distinguished Lecturer program, there have been 6 requests and 5 approvals.

In the discussion that followed, it was suggested that active chapters can host ISITs. In terms of incentives for forming chapters, the Society grants \$1000, with access to the DL program, as well as participation in the Chapter of the Year Award. Chapter organizers are invited to the Chapters lunch. Nevertheless, more incentives would further promote chapter activities.

8. Gerhard Kramer made a motion for a BoG vote on the The James L. Massey Research and Teaching Award for Young Scholars. The annual award is to recognize outstanding achievement in research and teaching in information theory by a young scholar who exemplifies the special quality of James L. Massey to integrate outstanding research with excellence in teaching. The award consists of a plaque and a \$1000 honorarium. The award is funded by the IEEE Information Theory Society. The nominee must be 40 years old or younger and a member of the Information Theory Society on January 1st of the year nominated. The details of the award were presented at the ISIT 2014 BoG meeting in Hawaii.

In the discussion which followed, it was asked how the quality of teaching was to be judged. Presumably, teaching evaluations would be used. However, it was pointed out that some schools do not have teaching evaluations. Gerhard mentioned that this is covered in the report proposing the award. He also pointed out that receiving the award may play a significant role in tenure and promotion cases.

It was also pointed out that the proposed changes to the bylaws accompanying the proposal will have to be approved.

Motion: To approve the establishment of the The James L. Massey Research and Teaching Award for Young Scholars. Motion was passed via an email vote which took place September 20-27, 2014.

9. Discussion returned to the issue of hiring a 50% time administrative employee for IT Society. It was pointed out that this would require about \$55k per year. One issue is whether the employee would be hired through IEEE or not. It was suggested that there are benefits to hiring through IEEE, such as the availability of better connections for hiring, and better interaction with other societies. It was pointed out that other societies have a lot of administrative support. Another issue is whether the employee would start in January or December.

On the other hand, objections were raised against the establishment of the position, noting that the set of tasks in the job description did not amount to a half-time position.

Motion: For the IT Society to hire a half-time administrative employee for calendar year 2015. The employee is to work from IEEE headquarters with salary, benefits, overhead, travel, and incidental costs for 2015 not to exceed \$57k. Motion was passed via an email vote which took place September 20-27, 2014.

10. Discussion returned to the Shannon Centennial celebrations. It was noted that Shannon should be much better known by the general public, and the Society should undertake a major outreach effort. An ad hoc committee may be formed to pursue this effort.

The meeting was adjourned at 10:20 AM Pacific Time.