IEEE Information Theory Society Board of Governors meeting minutes

The Marine Room, La Jolla, CA, 02.01.2015, 1 PM- 5 PM Pacific Time Edmund Yeh

Present: Michelle Effros, Ruediger Urbanke, Abbas El Gamal, Urbashi Mitra, Vijay Kumar, Vincent Poor, Jeff Andrews, Wei Yu, Aylin Yener, Matthieu Bloch, Edmund Yeh, Emanuele Viterbo, Michael Honig, Alex Vardy, Andrew Barron, Elza Erkip, Emina Soljanin, Tracey Ho, Nick Laneman, Dave Forney, Anand Sarwate, Frank Kschischang (via Skype), Gerhard Kramer (via Skype).

The meeting was called to order at 1 PM Pacific Time by Information Theory Society (ITSoc) President, Michelle Effros.

- 1. **Motion**: Vote to approve the minutes from the GlobalMeet BoG meeting (9/20/2014). Motion was passed.
- 2. Motion: Vote to approve the meeting agenda. Motion was passed.
- 3. Michelle presented the President's Report. Michelle welcomed the 2015 class of BoG Members: Helmut Bölcskei, Stephen Hanly, Ubli Mitra, Vince Poor, Aylin Yener, and Wei Yu, as well as the new officers: Rudiger Urbanke (Second Vice President), Daniela Tuninetti (Treasurer), Michael Langberg (Newsletter Editor). Michelle expressed thanks to Abbas El Gamal for his service as President, Muriel Medard for her service as Senior Past President, Aylin Yener for her service as Treasurer, Tara Javidi for her service as Newsletter Editor, Matthieu Bloch for his service as Online Committee Chair, as well as continuing officers, committee members, and members of the board.

Congratulations were given to ITSoc members who have recently won IEEE Awards and Medals. These include Imre Csiszár (Hamming Medal), Richard Baraniuk (Mulligan Education Medal), Simon Litsyn (Johnson Information Storage Systems Award), and Andrea Goldsmith (Armstrong Achievement Award). IT Society Members who became IEEE Fellows in the class of 2015 are: Jean Armstrong, Gerhard Bauch, Kristine Bell, Daniel Bliss, Christian Cachin, Ning Cai, Biao Chen, Merouane Debbah, Pingzhe Fan, Nihar Jindal, Young-Han Kim, David Love, Gianluca Mazzini, Krishna Narayanan, Aylin Yener, and Wei Zhang. Finally, the prestigious National Medal of Science has been awarded to Tom Kailath.

Michelle gave an update on the position of the ITSoc Administrator. This position was approved by the BoG in Fall 2014, approved and posted by the IEEE in winter 2014/2015. IEEE has been concerned with the quality of the received applications for the position. IEEE is currently looking to create a full-time position by combining the ITSoc position with a position sponsored by the IEEE or by another society.

Michelle reported on the State of the Society. Currently, Society finances are sound with room for new initiatives. The Transactions continues its tradition of excellence. Conferences are on track for 2015-2017, while the venue for ISIT 2018 remains to be determined. ITSoc membership grew by 4% in 2014. The ITSoc was awarded the 2014 IEEE Professional Development Award, which recognizes the Society's exemplary educational, mentoring, and member support services (e.g., mentor network, WITHITS, Student Committee, Schools, etc.)

Abbas noted that he received the IEEE Professional Development Award on behalf of the Society. The award will be passed on to the next President.

In terms of priorities for the coming year, Michelle noted that the ITSoc does a good job of fostering

communication among its members, but doesn't do as well at communicating beyond the Society. To remedy this, outreach and education activities should extend beyond the IT community. The Shannon Centennial (April 2016) is a great opportunity to start these activities. Other possible activities include the following. A sub-committee of the Conference Committee is investigating the possibility of joint workshops with other communities. The Newsletter Editor is considering curating a series of articles by authors outside our community on topics with potential for mutual exploration. An ad hoc committee is being formed which will team up with science shows, blogs, authors, or the local press to highlight the past, present, and future of information theory. The Committee will also prepare materials for Shannon Days around the world, and educational materials for kids, teachers, and the broader public. In these outreach activities, the WITHITS, Student, and Outreach Sub-committees will also play important roles.

A discussion followed. Given the influence of Shannon's master's thesis on computing, it was suggested that Shannon Centennial activities be connected to the Computer Society. It was also suggested that the Boole Bicentennial held in Cork, Ireland, be connected with the Shannon Centennial. It was noted that there have recently been a number of movies focused on scientific and technological figures (e.g. Nash, Turing, Hawking). Perhaps it's time for a well-made movie on Shannon. It was pointed out that the IEEE has a media and publicity arm which can professionally produce movies. The Khan Academy seems to have produced some very accessible videos on information theory. Another possibility is to use crowd-sourcing to produce videos. Finally, science museums may be contacted to advertise Shannon-related activities.

4. Aylin Yener presented the (Former) Treasurer's Report. Aylin first discussed the 2014 budget, for which the actual numbers and bottom line will be available late February/early March 2015. Due to the 2013 surplus, the Society has \$55k from the 50% rule. Support for the three new schools (i.e. Hong Kong at \$20k, India at \$10k and Australia at \$15k) were included as our three initiatives in 2014. A note to the new Treasurer: initiatives can be up to three years. Aylin suggests that support for the 2015 Hong Kong and India Schools be included as initiatives. Aylin moved to the 2015 budget. The budget was finalized in Sept 2014. The projected surplus is \$125k. Support for the 2015 North American, European, East Asian, and Indian Schools were all approved (totaling \$66.5k). The Distinguished Lecturer (DL) program is healthy but can grow further. Currently, travel expenses of \$2k are allowed for each DL visit. New initiatives are needed for 2015. Aylin concluded that the Society budget is in good shape. The financial outlook for 2014 and 2015 looks strong. Conference closings are on schedule up to now, but need to be watched closely. Reimbursements have all been finished.

In the ensuing discussion, it was suggested that the Society should spend as much as it can. One way to improve Society finances for the long term is to have new conferences, and to co-sponsor new conferences.

5. Gerhard Kramer presented the Nominations and Appointments (N&A) Committee Report. Gerhard reviewed the composition of the N&A Committee, the External Nominations Committee, the Fellows Committee, and the Awards Committee, as well as the Shannon, Wyner, Cover, and Massey Award Committees.

Gerhard then discussed the Online Committee, of which Matthieu Bloch has served as Chair since 2011. The N&A Committee appoints Anand Sarwate, who has served on the Online Committee since 2007, as the new Online Committee Chair.

Motion: Vote to approve the appointment of Anand Sarwate as the Online Committee Chair. Motion was passed.

6. Matthieu Bloch presented the Online Committee Report. Matthieu began by mentioning that hosting

on Pareja and web.com has been officially terminated. A complete backup of the server has been carried out. Part of the former hosting budget for web.com will be reused for itsoc.org. Matthieu reported that SixFeetUp has had a new project manager since fall 2014, with a smooth ongoing transition. The Master Service Agreement is in place for 2015. SixFeetUp rates have increased from \$150/hour to \$165/hour.

Matthieu anticipates a 6-8 months transition period with Anand. During this period, the list of the Online Committee's role and tasks will be drafted. The documentation of new features and the media resources project will be finished. In terms of social media, an experimental Facebook page has been set up at https://www.facebook.com/pages/IEEEInformation-Theory-Society/339934289488983. Further experimentation will be carried out on the page before public advertisement. An IEEE.tv test channel is now available at https://ieeetv.ieee.org/player/html/viewer?channel=information-theory. The Committee is finalizing the re-encoding of all media resources. Videos will be linked into itsoc.org for easier navigation.

A discussion followed. It was suggested all IT conferences be hosted on the ITSoc website. Such a measure may require a statement of support from the BoG. It was pointed out that the ITSoc website could be scaled better (e.g. website should automatically be scaled for mobile devices). It was suggested that this project may become a \$10k initiative.

7. Aylin Yener presented the Schools Subcommittee report. The main item was the proposal for the 2016 European School of Information Theory in Gothenburg, Sweden. Giuseppe Durisi presented the School proposal. The proposed location for the School is Chalmers University of Technology located in central Gothenburg. The organizers are Fredrik Brannstrom, Giuseppe Durisi, and Alexandre Graell i Amat. Gerhard Kramer will serve as advisor. The School will take place April 4-8, 2016, on campus. The planned program includes 6 invited tutorial lectures, poster presentations, and a research visit to Ericsson. Topics include finite block lengths, fiber optics, distributed storage, compressive sensing, wireless networks, and graphical models. Confirmed lecturers include Gerhard Kramer and Henry Pfister. The target attendance is 100 participants (PhD students and postdocs). The organizers ask for ITSoc financial support of \$20,000. This amount will be used to cover rent of rooms, tutorial speakers (partly), and lunches.

A discussion followed. It was suggested that ITSoc members be offered a significantly lower registration fee. It was also suggested that Schools try to obtain more support from industry. Finally, it was pointed out that Schools should be combined with membership drives. School registration should try to get participants to sign up for membership.

Motion: To approve funding at \$20k for the 2016 European School of Information Theory in Gothenburg, Sweden. Motion was passed.

8. Frank Kschischang presented the Editor-in-Chief (EiC) Report. Frank expressed thanks to the support of the Executive Editorial Board members, the Peer Review Support Specialist, the Senior Editor, and the Information Director. He reviewed the Associate Editor retirements since July 2014. Giuseppe Durisi, the former Publications Editor, retired in August 2014. The Publications Editor role is now terminated, as the only task in the post-Pareja era is paper-scheduling, which requires approximately 10 minutes per month using IEEE's POPP (Publishing Operations Production Portal) tool. This task is now performed by the EiC.

Frank reviewed the Editorial Board status as of February 2015. The Board currently consists of 41 Associate Editors (AEs). Some further expansion of the Editorial Board (to about 50) is planned. Particular needs exist in compressive sensing, complexity and cryptography, quantum information theory, and statistics.

Frank then presented some statistics. The number of papers submitted to the Transactions has declined

slightly over the last two years. The page budget for the Transactions in 2014 was 8500 pages. The actual page count was 8074. This yields a surplus of \$34k in publication costs. Frank presented the acceptance and rejection rates during 2014, in overall terms and by editorial area. The fast rejection rate (decision taking fewer than 30 days) is about 12%. Excluding decisions made within 30 days, the median time to first decision is 195 days (the overall median is 170 days). The first decision is reached within one year in 87% of cases. Outliers among Associate Editors are a concern. Frank and Lisa Jess are monitoring this, and sending reminders when appropriate. Some aggressive action (re-assignment of papers) was taken in July 2014 in one case.

A discussion followed. It was noted that there is still a sense that the decision time for the Transactions is too long. Frank indicated that the Board would quickly flag papers which are delayed. It was suggested that the Board try to identify which factors are most important in causing editorial delays. It was asked what the average load for an AE is (30 papers a year). It was then suggested that the Board should aim for roughly 2 papers per month per AE. By that measure, the current load may be too large.

8. Ruediger Urbanke presented the Membership Committee Report. The main items are the Outreach and Student Subcommittee Reports, presented by Joerg Kliewer. Joerg first presented the Outreach Subcommittee Report. Joerg thanked Elza Erkip and Daniela Tuninetti, who are leaving the committee. Bobak Nazer is continuing, while Tara Javidi is joining as a new member. It is proposed that Aaron Wagner and Joerg Kliewer serve as co-chairs of the Outreach Subcommittee.

Motion: To approve the appointments of Aaron Wagner and Joerg Kliewer as co-chairs of the Outreach Subcommittee of the Membership Committee. Motion was passed.

Joerg continued to report the recent activities of the Outreach Subcommittee. At ISIT 2014, the Subcommittee organized the panel discussion "How to Survive Tenure Track" with panelists Salman Avestimehr, Rob Calderbank, Natasha Devroye, and Pulkit Grover. Approximately 50 people attended. The panel was followed by the traditional ISIT mentoring get-together reception. Joerg gave an update on the Mentoring Program. Currently, there are about 31 mentoring pairs. Recent interviews indicate the success of the program. For 2015, a panel discussion on "101 Reasons to Study IT" has been organized for ITA with the Student Subcommittee. Panelists include Emina Soljanin, Andrea Montanari, and Venkatash Saligrama. There will also be an event for ISIT. The \$3k budget for 2015 will be sufficient for the planned activities. For the long term, an advertising video, perhaps based on a revamp of the UCSD Shannon video, is being planned.

In the discussion which followed, it was recommended the Subcommittee return with a more formal proposal on the advertising video. The proposal is a good candidate for an initiative.

Joerg moved to report the activites of the Student Subcommittee. The faculty coordinators for the Subcommittee are Deniz Gunduz and Osvaldo Simeone. At ITA 2014, a panel discussion (co-organized with the Outreach Committee) on "Landing Your Dream Job" was held at Tony Roma's. Panelists included Giuseppe Caire, Bertrand Hochwald, Muriel Medard, and Joseph Soriaga. Lunch was served and the event had very high attendance. At CISS 2014, a roundtable discussion on current research topics with moderators and pizza also had very high attendance. At ISIT 2014, lunch with the Shannon awardee was hosted by Osvaldo Simeone. The interview is available at: http://media.itsoc.org/isit2014/JanosKornerInterview.mp4. Expenses for the ITA 2014, CISS 2014 and ISIT 2014 events are already in the budget. For 2015, one goal is to extend membership to students and postdocs with the aim of enhancing diversity and establishing a presence in Asia and Latin America. The ITA panel, CISS roundtable discussion, and the ISIT Meet the Shannon Awardee event will be continued. The Subcommittee budget for 2015 is \$10k.

9. Elza Erkip presented the Conference Committee Report. New members of the committee are Albert Guillen i Fabregas, Ubli Mitra, and Daniela Tuninetti (ex-officio). Retiring members are Lars Rasmussen and Aylin Yener (ex-officio).

Elza gave updates on upcoming ISITs. First, for ISIT 2015 in Hong Kong (Tse, Yeung), finances are in good shape, with a \$60k loan from IEEE. Sponsorship and the venue have been finalized. Plenary speakers and tutorials have been confirmed. Submissions are now closed. The conference received 953 submitted papers, which will be handled by 153 TPC members. Semi-plenary sessions will be held at the conference. For ISIT 2016 (Guillen i Fabregas, Martinez, Verdu), the venue, banquet venue, and PCO have been finalized. For ISIT 2017 in Aachen (Kramer, Mathar), the dates June 25-30 have been fixed. An initial budget as well as potential sponsors have been determined. For ISIT 2018, there is strong interest from a team in Colorado (Mahesh Varanasi, Rockey Luo, Ali Pezeshki). The team is currently examining venue options and quotes. Other possibilities for 2018-2019 include Helsinki in 2018 (Vitaly Skacheck) and Paris in 2019 (Pablo Piantanida).

A discussion followed on ISIT 2018. It was suggested that having ISIT at a non-urban location can lead a memorable experience (e.g. Whistler, Canada for ISIT 1995). Colorado in the summer can be refreshing. On the other hand, some concerns were expressed regarding the high elevation in Colorado, and its effects on the health of attendees. It was suggested that the organizers closely examine the accessibility of venues in terms of travel times from major airports. Ali Pezeshki mentioned that the team will be visiting potential venues over the summer.

Elza next discussed the schedule for ISIT approvals. The Conference Committee recommends that approvals for ISITs be decided only during the annual BoG meeting during ISIT. Reasons for this include (1) larger BoG participation at the ISIT BoG meetings, (2) ease of attendance by the proposers, (3) ease of scheduling competing proposals. For ITWs, it is recommended that proposals be evaluated as they arrive. Since there are multiple ITWs during a year, this allows the BoG to act quickly on topics and venues.

A discussion followed. It was pointed out that approving ISITs only at the ISIT BoG meetings can lead to excessive delay if proposals are not ready to be presented then. It was decided that there should not be an official motion regarding this proposal. Rather, the proposal can serve as a guideline for the BoG.

Elza continued with an update on the upcoming ITWs. For ITW 2015 in Jerusalem, decisions on papers have been sent and the program is in place. There will be a panel chaired by Tony Ephremides. Workshop registration is now open. The contract has been delayed due to a lack of response from the IEEE. For ITW 2015 in Korea, the budget has been approved via email.

Elza continued with the proposal to hold ITW 2017 in Kaohsiung, Taiwan during Nov 5-8, 2017. The venue will be the KEC Kaohsiung Exhibition Center. The proposed General Co-Chairs are Po-Ning Chen, Gerhard Kramer, and Chih-Peng Li. The proposed Technical Program Co-Chairs are Hsiao-feng Lu, Stefan Moser, and Chih-Chun Wang. Workshop themes include information theory for content distribution, information theory and biology, coding for memories, and information theory and quantum communication. Hotel accommodation options, registration fees, a preliminary budget, a preliminary program, and preliminary deadlines were presented. A budget surplus of about 10% is expected. The conference committee recommends BoG approval of the ITW 2017 proposal.

In the brief discussion which followed, it was suggested that due to the low cost, the workshop could take place over 5 days rather than 3 days. This would allow for fewer parallel sessions. It was also pointed out that in the past, there would be one large ITW (with parallel sessions) and one single-track ITW per year.

Motion: To approve Kaohsiung, Taiwan, as the location for ITW 2017. Motion was passed.

Next, Elza mentioned that the Conference Committee has formed a new subcommittee to explore joint workshops to increase ties with other communities. The members of the subcommittee are Jeff Andrews, Michelle Effros (ex-officio), Elza Erkip, Ubli Mitra, and Alon Orlitsky.

Elza mentioned a new journal *IEEE Transactions on Molecular, Biological, and Multi-Scale Communications*, for which Ubli Mitra serves as Editor-in-Chief. Information on the journal can be found at https://www.ieee.org/membership-catalog/productdetail/showProductDetailPage.html?product=PER475-ELE.

Next, WiOpt 2015 has requested technical co-sponsorship from ITSoc. ITSoc has provided technical co-sponsorship since 2006. The Conference committee recommends BoG approval of this request.

Motion: To approve technical co-sponsorship for WiOpt 2015. Motion was passed.

Elza discussed the financial implications of technical co-sponsorship (TCS). Starting December 31, 2015, IEEE will charge \$1000 per conference and \$15 per paper for TCS. This cost can be borne either by ITSoc or by the co-sponsored conference. Currently, ITSoc pays for TCS as overhead, but it is not clear how this overhead is computed. Another option is for ITSoc to offer financial co-sponsorship in return for a small percentage of the conference revenue. The cost and revenue for the Society under this option are not clear.

In the brief discussion which followed, it was suggested that financial co-sponsorship may be beneficial for the Society due to the additional revenue gained. It remains unclear, however, how favorable conferences would be to financial co-sponsorship.

The meeting was adjourned at 4:30 PM Pacific Time.