## IEEE Information Theory Society Board of Governors meeting minutes

Catamaran Resort, San Diego, CA, 02.10.2013, 1-6pm Edmund Yeh

## Present:

Jeff Andrews, Matthieu Bloch, Giuseppe Caire, Michelle Effros, Abbas El Gamal, Elza Erkip, Michael Honig, Tara Javidi, Negar Kiyavash, Joerg Kliewer, P. Vijay Kumar, Urbashi Mitra, Alon Orlitsky, Petar Popovski, Paul Siegel, Emina Soljanin, David Tse, Rudiger Urbanke, Sergio Verdu, Alex Vardy, Emanuele Viterbo, Edmund Yeh, Aylin Yener.

The meeting was called to order at 1:10pm by the Information Theory Society (ITSoc) President, Gerhard Kramer, who welcomed the Board of Governors (BoG).

1. Motion: The minutes of the BoG Meeting at ITW 2012 held at Lausanne, Switzerland, were approved.

2. Motion: The agenda was approved.

3. Gerhard presented the President's Report. Gerhard welcomed the new members of the BoG: Jeff Andrews, Michael Honig, P. Vijay Kumar, Emina Soljanin, Rudiger Urbanke, and Ram Zamir.

Major honors for IT Society members were celebrated: Sol Golomb (recipient of U.S. National Medal of Science), Abbas El Gamal (elected Member of the U.S. National Academy of Engineering), Shlomo Shamai (Shitz) (elected Foreign Associate of the U.S. National Academy of Engineering), Irwin Jacobs (recipient of the IEEE Medal of Honor), Robert Calderbank (recipient of the Hamming Medal), Erdal Arikan (recipient of the W.R.G. Baker Prize Paper Award), Vahid Tarokh, Hamid Jafarkhani, Siavash Alamouti (recipients of the Eric E. Summer Award).

Congratulations to the new IEEE Fellows from IT Society: Jeff Andrews, Andrew Barron, Gerard Cohen, Max Costa, Suhas Diggavi, Anders Host–Madsen, Kenneth Kreutz-Delgado, Tamas Linder, Daniel Palomar, Erchin Serpedin, Antonia Tulino, Pramod Viswanath, Tsachy Weissman, Feng Wu.

Gerhard noted that the IEEE Technical Activities Board (TAB) meeting will take place February 15-16. The IT Society Review will take place on Thursday, Feb. 14. He expressed thanks to Muriel for organizing the society review, and to the following contributors for providing text: Bruce, Helmut, Abbas, Sriram, Elza, Joerg, Negar, Prakash, Frank, Tara, Matthieu, Aylin.

4. Aylin presented the Treasurer's report. Aylin first summarized some recent conference closings. The 2011 North American IT School held in Austin, Texas, ended with no surplus (and with \$25,008 society support). The 2011 ISIT ended with a surplus of \$118,074. The 2012 North American IT School, Cornell, ended with a surplus of \$6,939. Conferences which have not started the closing process include the 2012 European IT School, Turkey, April 2012, and the 2012 ISIT, MIT, July 2012.

With regards to conference closings, Aylin held up ITW 2012 as a great example. The conference generated a surplus of \$8,453. It was held September 2012 in Lausanne. As of February 7, 2013, it was ready to close within a week. The overall process took only five months from the conclusion of the conference (inclusive of the audit).

Aylin continued onto the 2013 budget. The budget was prepared in May 2012, approved in July 2012, and finalized in November 2012. The initial projected surplus for 2013 was \$131k (approved by Aylin). The

surplus was then decreased to \$2k due to an increase in the page budget of IT Transactions pages to 8000. Then, in September, the budget was updated to have a surplus of \$179.4k. The explanation given by the IEEE is that this was due to additional income for 2012 from "ASPP India (AICTE) agreement." As a result of this, Aylin requested an immediate increase from \$100k to \$120k for committee budgets. This was approved by TAB. The final projected surplus for 2013 is \$159.4k.

Aylin continued onto the 2012 budget. The forecast for the 2012 budget at the preparation stage was a surplus of \$84.7k (finalized in 2011). As of May 2012, the end-of-year surplus was forecasted to be \$119k. During the summer, the forecast went down significantly (to as low as \$0.7k). By late October, thanks to revenues and reducing the original increase in the Transactions page budget, the surplus was back up to \$66k. As of October 22, the surplus remained at \$66k and the situation was regarded as "unfavorable" by IEEE. However, the surplus has now climbed to \$219k. The additional \$153k seems to have come again from "ASPP India (AICTE) agreement." Aylin commented that forecasts appear to be less than informative, and that we should try to plan the budget as best as we can (at least the parts we can control) and then go about spending it to benefit the Society.

Aylin emphasized that the time to plan the 2014 budget is now. The major components of the budget are 1) committee allocations (Schools, Online, M&C [Distinguished lecturers], Student, Outreach), 2) Transactions page budget (EiC) and 3) Print subscription fees. Current proposed committee allocations are: Schools: \$40k, Student: \$10k, Outreach: proposed increase from \$1.5k to \$3k. WITHITS: proposed increase from \$1.5k to \$3k. Budgets for the Online and DL committees are yet to be determined.

Gerhard noted that there is no need to vote on small committee budget allocation increases. The Treasurer is authorized to implement the increases.

Motion: increase the print subscription fee for IT Transactions to \$100 for IT Society members.

The current cost of print transactions is \$147 per subscription. We currently charge \$65. Other societies have already crossed the \$100 mark (Example: SP was \$69 and increased to \$104).

Discussions on the motion followed. Some BoG members noted that many members receive print versions of the Transactions, and since the Society currently has a surplus, there is no need to increase print subscription fees significantly. Others contended that the Society should not subsidize wasteful paper copies.

**Motion**: Friendly Amendment: increase the print subscription fee for IT Transactions to \$80 for IT Society members. Motion was passed.

Aylin ended with a note regarding reimbursement of expenses.

5. Giuseppe Caire presented the Nominations & Appointments (N&A) Committee report. The 2013 N&A has the following members: Giuseppe Caire (SPP, ex-officio Chair), Muriel Medard (JPP, ex-officio), G. David Forney, Jr., David Neuhoff, and Shlomo Shamai.

As of Fall 2012, Elza Erkip was nominated (by the N&A Committee) to be Chair of the Conference Committee. Sriram Vishwanath and Elza Erkip have co-chaired the Student Committee in 2011-2012. Given Elza's new appointment, the N&A Committee decided to nominate Sriram as the sole chair of the Students Committee.

Motion: Vote to approve Elza as Chair of the Conference committee. Motion was passed.

The 2013 Awards Committee consists of Abbas El Gamal (ex officio, Chair), Michelle Effros (ex officio), continuing members Michael Gastpar, Alex Grant, Igal Sason, Emanuele Viterbo, Aaron Wagner, Randall Berry, Ubli Mitra, new members Merouane Debbah, Andreas Winter, Vijay Kumar, Pascal Vontobel, Young-Han Kim, and outgoing members [SPECIAL THANKS] include Ian Blake, Emina Soljanin, David Tse, Greg Wornell.

The 2013 External Nominations Committee consists of Gerhard Kramer, with continuing members Alon Orlitsky, Han Vinck, new members Helmut Bolcskei, Dick Blahut, and outgoing members [SPECIAL THANKS]: Prakash Narayan, Max Costa. The chair is to be elected by the committee itself, Gerhard Kramer will lead the process.

The 2013 Wyner Service Award Committee consists of Gerhard Kramer (Chair, ex officio), Muriel Medard (ex officio), continuing members Rolf Johannesson, H. Vincent Poor, new member Ian Blake, and outgoing member [SPECIAL THANKS] Anthony Ephremides.

The 2013 Shannon Award Committee consists of Gerhard Kramer (Chair, ex officio), Abbas El Gamal (ex officio), Michelle Effros (ex officio) continuing members Sergio Verdu, Raymond Yeung, new members Sol Golomb, Imre Csiszar, and outgoing members [SPECIAL THANKS]: Dick Blahut and Jacob Ziv.

In Fall 2012, the N&A Committee chaired by Frank Kschischang selected Yannis Kontoyiannis to be the next Editor in Chief of the IEEE Transactions on Information Theory, succeeding to Helmut Bolcskei. Yannis was contacted by the committee and agreed.

Motion: to approve Yannis Kontoyiannis as the next EiC of the Transactions. Motion was passed.

6. Matthieu Bloch presented the Online Committee Report. Matthieu noted that the Society website had been running smoothly and consistently until February 5th, when it experienced significant slowdowns and errors (error 504). The problem has been fixed on February 8th, with the website running up again, but the fundamental cause of the problem has not been precisely identified yet. The developers have scheduled additional time to fix the issue next week, and the Online Committee will provide more information then.

Following the discussion during the BoG meeting in Lausanne, the Online Committee has investigated the possibility of using an online version of the newsletter to complement the paper version. Matthieu presented a sample online newsletter based on the December 2012 newsletter. The benefits of having an online newsletter include: a timely dissemination of the articles, the possibility of publishing articles online as they are received - readers can be kept informed of updates by subscribing to a specific rss feed improved visibility of articles (e.g. the articles discussing recently awarded papers, etc.) The Online Committee recommends the porting of the next newsletter online as an experiment. This could be achieved with coordination between the newsletter and the online editor.

Following the suggestion of the BoG, the Online Committee has also investigated the possibility of introducing online Discussion papers. A feature for posting comments is already available in the website infrastructure and an example of discussion has been setup online. As suggested by Nick Laneman, a possibility would be to have students post review papers or summaries from seminars. The Online Committee suggests that we identify student volunteers to test the current setup.

A discussion followed on online discussion papers. It was noted that currently, only award papers and fundamental papers are available for online discussion. It was suggested that something similar to the Communications Society Digest can be implemented, whereby a subset of papers are presented for reading and discussion. Matthieu continued: the Online Committee has also investigated options to more actively push the table of content of the latest issue of the Transactions. Presently, it is already possible to subscribe to a feed on IEEEXplore: feed://ieeexplore.ieee.org/rss/TOC18.XML. Several options are then available to advertise a new issue: 1) Encourage members of the IT community to register to the feed by providing detailed instructions on the subscription process; 2) Create a "mailing list" (through feedburner) to which users can register, which would push the latest table of content to emails; 3) Pull the content of the feed from the IEEEXplore feed and display it on the website; one can imagine complementing this with a news item once the latest TOC is available. Options 1 and 2 can be implemented with minimal effort and without extra development. Option 3 would require some development time (to be estimated).

**ToDo**: The Online Committee will submit a proposal for effective and attractive dissemination of the Society newsletter and IT Transactions Table of Contents.

Finally, Matthieu presented recent analytics on website use and statistics on the Society mailing list.

7. Reports from Schools. Petar Popovski presented the report on the European School of Information Theory (ESIT) 2013 in Ohrid, Republic of Macedonia, April 22-26, 2013. Lecturers for ESIT 2013 include Suhas Diggavi, Stark Draper, Bane Vasic, Angel Lozano, Osvaldo Simeone, and Christina Fragouli. The School is located in an accessible location and expects to receive many students from the Balkans. The Society has supported the school with US \$20k. The School registration deadline is Feb 15, 2013.

Sergio Verdu presented the report on the 2013 North American School of Information Theory at Purdue University, West Lafayette, IN, June 4-7, 2013. The School is organized by the Center for Science of Information, a National Science Foundation Science and Technology Center, and is sponsored by the IT Society. This year the school will introduce several interdisciplinary topics in the emerging field of science of information. Although the focus is on information theory, interdisciplinary topics are welcome, e.g., topics related to mathematics, physics, biology, control, networking, etc. Invited speakers include Scott Aaronson, Michelle Effros, Mehmet Koyuturk, P.R. Kumar and Padovani Lecturer Emina Soljanin. Registration deadline is May 15, 2013.

On behalf of Vitaly Skachek, Gerhard Kramer presented the report on European School of Information Theory 2014 in Estonia. The School will be held in a resort/hotel along the northern coast, around 1 hour drive from Tallinn. The School will involve about 80 students/post-docs/researchers, with 4 hours of lectures for five days, and students talks or posters in the afternoon. The School will take place in May 2014, with registration in January-February 2014. The Institute of Computer Science, the University of Tartu, will provide administrative support. The European School of Information Theory 2014 asks for \$20,000 from the IEEE IT Society. The funds will be used to pay invited speakers, and to cover administrative costs, rented equipment, buses, activities, etc.

Motion: Approval of funding for the European School of Information Theory 2014. The motion was passed.

There is an upcoming proposal for the 2014 North American school to take place at Toronto. It will take place at the University of Toronto campus, organized by Stark Draper, tentatively scheduled for mid June 2014. The full proposal will be presented at the ISIT BoG meeting in Istanbul.

A discussion followed on whether there should be IT Schools in China, including Beijing and Hong Kong.

8. Joerg Kliewer presented the Outreach Committee Report. The main activity since the last report at ISIT 2013 is an attempt to recruit more mentors for the mentoring program. Other activities for 2013 include

an ITA panel discussion "How to navigate the job market," co-organized with Student Committee, and an ISIT 2013 mentoring event. There are plans to address issues for junior faculty: tenure track, research questions, student recruitment, and proposal writing. Activities for 2014 include a panel discussion at ITA and a mentoring event at ISIT 2014. Joerg noted that we may not be able to cover all activities with our current budget of \$1.5k. Joerg ended by presenting an outline application form for the mentoring program.

9. Negar Kiyavash presented the WITHITS committee report. Recent events include afternoon tea with Katalin Marton at ITW Lausanne. Upcoming events include informal lunch and discussion at ITA 2013, and luncheon and panel discussion at ISIT 2013. The WITHITS website is being overhauled, with content being moved from the EPFL to the IEEE host, and additional historical notes on women in IT, as well as videos and interviews.

10. Alon Orlitsky presented the External Nominations Committee (ENC) Report on behalf of Prakash Narayan. The ENC, a new committee formed in February 2012, consisted of Max H. M. Costa, Muriel Medard, Alon Orlitsky, A. J. Han Vinck and Prakash Narayan (Chair) as its members for 2012.

The ENC is described by the Society bylaws as follows: "The External Nominations Committee shall consist of the External Nominations Committee Chair, the Society President and three additional members. The Chair and other members are appointed by the Nominations and Appointments Committee. Typically the members of the Committee will serve for two years, with staggered terms. The Committee will be responsible for the solicitation, processing and submission on behalf of the Society of nominations for appropriate IEEE awards (such as, for example, the IEEE W. R. G. Baker Award) and, as applicable, for awards outside of the IEEE."

The ENC submitted a successful nomination for the 2013 IEEE W. R. G. Baker Award: E. Arikan, Channel Polarization: A Method for Constructing Capacity-Achieving Codes for Symmetric Binary-Input Memoryless Channels, IEEE Transactions on Information Theory, Volume: 55, Issue: 7, Year: 2009, pages: 3051 - 3073.

The ENC also submitted or coordinated nominations for the IEEE Medal of Honor and the IEEE Hamming Medal for 2013. Also, potential nominees and corresponding nominators have been identified for the IEEE Founders and von Neumann Medals, as also for the Marconi, Kyoto and Okawa Prizes; these nominations are to be considered for submission in 2013. In addition, the ENC helped generate nominations, with deadlines in early 2013, for the following: IEEE Kirchmayer Graduate Teaching Award, IEEE Kobayashi Computers and Communications Award, IEEE Sumner Award, and the Japan Prize (in the field of Electronics, Information and Communication).

11. Michelle Effros presented the report of the Ad Hoc Committee on Outreach and Education. The committee was formed in 2011, with members Michelle Effros (chair), Gerhard Kramer, Ubli Mitra, Vince Poor, Paul Siegel, and Lizhong Zheng. The committee's charge is to consider a range of outreach goals and activities, and to advise the BoG on possible roles for the Society. Possible outreach goals include raising financial support for the community, influencing funding agencies, and stimulating funding at other agencies. Possible outreach activities include workshops, publications/presentations to general media, and actively encouraging service at the NSF (by setting up a society nominating committee). Current committee priorities include influencing funding agencies, gaining visibility and recognition, and connecting with other communities. As a first experiment, an IT video contest is being run by the Student Committee for the purpose of producing IT-related video aimed at a broad audience.

In a discussion which followed, it was suggested that the Society lobby the U.S. Postal Service for a

commemorative stamp for Shannon's centenary.

12. Elza Erkip presented the Student Committee report on behalf of Sriram Vishwanath. Elza is the outgoing coordinator (huge thanks). Student coordinators include Galen Reeves, Mustafa El-Halabi, and Alex Dytso. Recent activities include organized Pictionary at Allerton 2012. The committee (jointly with the Outreach committee) will sponsor a jobs/mentorship panel for students and postdocs at ITA 2013. Panelists will include Giuseppe Caire, Elza Erkip, Dongning Guo, Bobak Nazer, and John Smee (Qualcomm).

The Committee proposes an IT video contest. Applicants would post short (<10 min) videos on Youtube. The theme of the video is to introduce basic information theory concepts (ex: how your phone works, basic coding concepts). A website, which will contain good video examples, will be used to advertise the contest. The contest is timed to conclude during ISIT 2013, with the announcement made on Monday (lunch). Judging criteria will be rating on Youtube. Prizes will include Shannon's collected works, and will be handed out on Thursday (lunch). The committee requests a budget of \$500 for the awards.

In a discussion that followed, it was suggested that the video contest be turned into an initiative, and that the prize amounts be increased.

13. Michelle Effros presented the report of the Ad Hoc Committee on the Role of the Membership and Chapters Committee. The committee was formed at ISIT 2012, with members Michelle Effros (chair), Abbas El Gamal, Elza Erkip, Michael Gastpar, Negar Kiyavash, Joerg Kliewer, Sriram Vishwanath, and Lizhong Zheng. The committee's charge is to advise the BoG on a proposal to combine the Membership & Chapters Committee (MCC) with Student and Outreach Committees, as well as to define the charge of the new Membership Committee to reflect the activity of the combined committee. The current bylaws on the Membership & Chapters Committee and the Student Committee were presented. The proposed updated bylaws on the Membership Committee, with the two standing Student and Outreach sub-committees, were presented.

In the discussion which followed, it was suggested that the purposes of the committee versus the subcommittees were not clear enough, and that the proposed bylaw language is not specific enough.

**ToDo**: The Constitution and Bylaws Committee will review the proposed bylaws change, and submit text to the BoG three weeks prior to the ITW 2013 Seville meeting.

14. Paul Siegel presented the report of the Ad-hoc Committee on New Awards. The committee members are Abbas El Gamal, Alex Vardy, Andrea Goldsmith, Frank Kschischang, Giuseppe Caire, Sergio Verdu, Paul Siegel, along with Gerhard Kramer, Muriel Medard, and Dave Forney.

Paul described the steps involved in the establishment of a new award, along with possible funding sources. Paul summarized the existing IT awards, and then discussed the Thomas M. Cover Dissertation Award. This new award was approved by the IT Society BoG in July 2012. It is to be funded by the IT Society, with an initial gift from Abbas (other gifts are welcome). The next required steps are to 1) approve the proposed IT Society Bylaw with a dollar amount and to 2) submit a completed form for TABARC/TAB approval. Paul presented the language of the proposed bylaw for the Cover dissertation award, with the dollar amount of the honorarium unspecified. Paul also presented the proposed BoG resolution.

Paul continued with the ISIT Student Paper Award. This award was established in 2010 (TAB approved), and is funded by IT Society. A name change was proposed at ITW 2012. The next required steps are to 1) approve with bylaw change and 2) notify IEEE Technical Activities Operations for approval by

TABARC/TAB. Paul presented the language of the proposed bylaw for the Jack Keil Wolf ISIT Student Paper Award. Paul also presented the proposed BoG resolution.

A discussion on the Cover dissertation award followed. At issue is the wording of the proposed bylaw. Some felt that the evaluation committee should consist of people who have advised many theses. Others felt that the workload on the Awards committee (which would be charged with choosing the winners of the award) would be too high. It was noted that there may be overlap between the best dissertation award and the best paper award. It was also noted that such overlaps routinely occur in other fields. After some discussion, Gerhard made an executive decision to postpone the vote for the approval of the Bylaws change for the Cover Dissertation Award.

**ToDo**: The Ad-hoc Committee on New Awards will reconsider the text of the bylaws change for the Cover Dissertation Award in coordination with the Constitution and Bylaws Committee.

**Motion**: approval of renaming and Bylaws change for the Jack Keil Wolf ISIT Student Paper Award. Motion was passed.

Paul raised the issue of whether to endow IT society awards. An endowment ensures long-term funding (in perpetuity) and provides a framework and psychological incentive for gifts. The IEEE Foundation, which manages the endowment, requires \$20k minimum corpus. The honorarium comes from interest income on the corpus. Administration fees may apply.

Finally, Paul mentioned that the TABARC form for the Padovani Lectureship should be submitted before March 2013 for TAB approval.

15. Elza Erkip presented the Conference Committee report. She thanked outgoing committee members Bruce Hajek (who will stay on for one more year to ease the transition), Joao Barros, and Martin Bossert. The current members are Gerhard Kramer, Abbas El Gamal, Aylin Yener, Paul Siegel, and Lars Rasmussen.

Motion: approve new Conference Committee members Bruce Hajek (one year only), Alon Orlitsky, Rudiger Urbanke. Motion was passed.

Elza gave updates on ISIT 2012, MIT (successfully completed), ITW 2012, Lausanne (very positive response), ISIT 2013, Istanbul (987 submitted papers, all papers forwarded to TPC). Update on ITW 2013, Sevilla: the workshop will take place September 9-13, with a paper deadline of April 1. The budget has been submitted. Currently, the surplus is around 7%, lower than the recommended 10%. This is partly due to plenary speaker expenses and honorarium. Organizers will look for other funds.

Motion: approval of ITW 2013 budget. Motion was passed.

Giuseppe Caire presented the proposal for ITW 2015 in Jeju Island, Korea. The workshop is to take place October 12-15, 2015. General co-chairs are Hong-Yeop Song and Giuseppe Caire. The program co-chairs are Sae-Young Chung, Rudiger Urbanke, and Pramod Viswanath. Giuseppe presented the background on the conference location, venue, transportation, tentative program, social events, registration fees, and potential sponsors.

Motion: approval of ITW 2015 proposal. Motion was passed.

Elza discussed plans for future ISITs (2017 and beyond). For 2017, Interested groups include Stockholm (contact: Lars Rasmussen), Aachen (contact: Rudolf Mathar), Melbourne (contact: Emanuele Viterbo), New York (contact: Aaron Wagner, Roy Yates). In terms of future ITWs, there is interest from Gurgen

Khachatryan for holding an ITW in Armenia.

Finally, Elza raised technical co-sponsorship proposals for NetCod 2014 (ITSoc has provided technical co-sponsorship for NetCod since 2008), and ISITA 2014 (ITSoc has provided technical co-sponsorship for ISITA since 2008).

Motion: approval of technical co-sponsorship for NetCod 2014 and ISITA 2014. Motion was passed.

16. Standing items. Aylin calls for more ideas for initiatives and proposals to spend 50% of the Society surplus.

Tony Ephremides has proposed a competition of a technical nature, in which the winner would gain custody of the notes left by David Middleton. In the discussion that followed, it was suggested that the notes should be made publicly available, perhaps after expert reviewing by an ITSoc member.

The meeting was adjourned at 5:43 PM.