IEEE Information Theory Society Board of Governors meeting minutes

Convention Centre (HKCEC), Hong Kong, China, 06.14.2015, 1 PM- 5 PM

Edmund Yeh

Present: Michelle E ros, Alon Orlitsky, Ruediger Urbanke, Gerhard Kramer, Frank Kschischang, Helmut Bolcskei,, Edmund Yeh, Aylin Yener, Vincent Poor, Daniela Tuninetti, Anand Sarwate, Emanuele Viterbo, Stephen Hanly, Elza Erkip, Wei Yu, Vijay Kumar, Alex Vardy, Vitaly Skachek.

The meeting was called to order at 1 PM Hong Kong Time by Information Theory Society (ITSoc) President, Michelle E ros.

1. **Motion**: Vote to approve the minutes from the February 2015 BoG meeting. Motion was passed.

2. **Motion**: Vote to approve the meeting agenda. Motion was passed.

3. Michelle presented the President's Report, and gave the State of the Society. During 2014-2015, a half-time Society administrator position was proposed and approved. The administrator will provide support and continuity for various Society functions. Michelle welcomed Matt LaFleur, who lled the position and started on May 26, 2015. Michelle then covered Society nances. The surplus from 2014 exceeds projections, which creates opportunities for expenditure. Several proposals will be presented at this BoG meeting. The Treasurer's report will provide further details. Moving on to broader outreach activities, an Ad Hoc committee has been formed to coordinate the activities. A focus are the Shannon Day celebrations. A documentary is being planned and a lmmaker has been contacted. Proposals have been submitted to the U.S. and Swiss National Science Foundations for nancial support for the documentary. The committee is also exploring materials and lectures for generating interest in information theory among children. As an example, Michelle will give a lecture to high school students in Hong Kong about information theory. The Broader Outreach committee's report will provide further details. Michelle then discussed future ISITs. Two decisions will be made at the present BoG meeting, regarding the locations of ISIT 2018 and ISIT 2019. There is a wealth of opportunities to consider. There will also be a discussion of the decision mechanis Td [(Pesion)]TJ 0 -13.5.54g8541(meeti)-317(Rep)-2b(cations)-341(ReDta)falstions(ReDta62(b)-28(.5.5ll)-46(

Motion: Vote to move the amounts allocated for the 2015 Indian School and South African School from the 2015 initiatives fund (from the 50% rule) to the 2015 regular budget. Motion was passed.

Motion: Vote to donate the remaining 2015 initiatives funds to the IEEE Foundation Account for Shannons Centennial. Motion was passed.

5. Gerhard Kramer presented the report of the Nominations and Appointments (N&A) Committee. Gerhard presented the slate of candidates for the BoG members election. The list includes Je Andrews, Matthieu Bloch, Todd Coleman, Sueli Costa, Suhas Diggavi, Stark Draper, Albert Guillen i Fabregas, Dongning Guo, Pierre Moulin, Krishna Narayana, Henry P ster, Emina Soljanin, Yossef Steinberg, and Pascal Vontobel.

Motion: Vote to approve the slate of candidates for the BoG members election. Motion was passed.

Gerhard proceeded to First and Second Vice President and President nominations. Elza Erkip and Emina Soljanin were nominated for Second VP.

Motion: Vote to approve the nominations of Elza Erkip and Emina Soljanin for Second Vice President. Motion was passed.

Ruediger Urbanke was nominated for First VP.

Motion: Vote to approve the nomination of Ruediger Urbanke for First Vice President. Motion was passed.

Alon Orlitsky was nominated for President.

Motion: Vote to approve the nomination of Alon Orlitsky for President. Motion was passed.

6. Alon Orlitsky presented the Awards Committee Report. Alon rst discussed the ComSoc/IT Paper Award. Five papers were nominated for 2015. The joint committee considered three nalists. The award was given to

M. Maddah-Ali ad D. Tse, \Completely Stale Transmitter Channel State Information is Still Very Useful."

Motion: Vote to approve the Awards Committee Report. Motion was passed.

Motion: Vote to approve the awarding of the 2015 IT Society Paper Award to the recommended paper by I. Tamo and A. Barg. Motion was passed.

Alon raised the issue whether the window for IT Society Paper Award nominations should be extended beyond two years.

7. Ruediger Urbanke presented the Membership and Chapters Committee report. The committee members include Negar Kiyavash, Joerg Kliewer, Paul Siegel, and Sriram Vishwanath.

Ruediger summarized the recent activities of the Student Committee, which includes Deniz Gunduz and Osvaldo Simeone. Ruediger then reported on the Outreach Subcommittee, which is co-chaired by Aaron Wagner and Joerg Kliewer, with Tara Javidi, Michele Wigger and Bobak Nazer as members. The Sub-committee co-organized (with the Student Committee) the panel discussion \101 Reasons to Study IT" with panelists Ubli Mitra, Emina Soljanin, and Andrea Montanari, at ITA 2015. The event had 50 atten-dees. At ISIT 2015, activities include a panel discussion "99 Biggest Career Mistakes and How to Avoid Them" with panelists Alex Dimakis, Elza Erkip, Madhu Sudan, and Ruediger Urbanke. The event will be videotaped and placed on the ITSoc website. This will be followed by the traditional ISIT mentoring get-together reception.

Ruediger gave an update on the mentoring program. There are currently 34 mentoring pairs (up from 31 last year). Some problems include relatively few new applications despite advertising e orts, challenges

current IT Society membership of 3300 is a small percentage of the IEEE total membership of 500,000. This proposal could be one way of increasing membership numbers.

A discussion followed. It was pointed out that all IEEE members should be accorded similar treatment. Requiring school attendees to be IT Society members may create a barrier for other IEEE members. It was also pointed out that membership has recently grown by 4%, a development which may be due to differential pricing at IT conferences and schools.

Motion: Vote to require all IT School attendees to be IT Society members. Motion was passed.

8. Elza Erkip presented the Conference Committee Report. The first item was the presentations for the ISIT 2018 proposals. Babak Hassibi presented the proposal for ISIT 2018 in Los Angeles, CA. The dates are July 15-21, 2018. The general chairs are Salman Avestimehr, Giuseppe Caire, and Babak Hassibi. The TPC chairs are Young-Han Kim, Frederique Oggier, Greg Wornell, and Wei Yu. The venue is the JW Marriott LA Live. The registration fee for IEEE IT Society members (advance) is $875. The expected total cost is $569.6k, with a surplus of about 10%. Babak emphasized that Los Angeles is a major hub for IT activity, and an accessible, convenient and beauty location, with many attractions as well as culinary and cultural diversity.

Mahesh Varanasi presented the proposal for ISIT 2018 in Vail, CO. The default choice for the dates is July 8-13, with the alternative dates being June 24-29. The general chairs are Ruediger Urbanke and Mahesh Varanasi. The TPC chairs are Syed Jafar, Andrea Montanari, and Chandra Nair. The venue is the Vail Cascade hotel. The registration fee for IEEE IT Society members (advance) is from $780-$810. The expected total cost range from $494k to $589k. Vail is about 2 hours by car from the Denver airport, with a shuttle service available between the two locations. Mahesh emphasized the beauty and intimate scale of the location, which may foster more interactions at the conference.

The presentations for the ISIT 2019 proposals followed. Vitaly Skachek presented the proposal for ISIT 2019 in Helsinki, Finland. The organizing committee are Marcus Greferath, Camilla Hollanti, Vitaly Skachek, and Olav Tirkkonen. The TPC chairs are Michael Gastpar, Muriel Medard, B. Sundar Rajan, and Aylin Yener. Possible venues are Messukeskus Helsinki, Expo and Convention Centre, Finlandia Talo Huset Hall, and Dipoli Center, Aalto University. The registration fee for IEEE IT Society members (advance) is from 730 to 800 euros. The conference will aim for a 11% surplus. Vitaly emphasized the low price level and of the location and the high activity level in the communications area in Finland.

Emanuele Viterbo presented the proposal for ISIT 2019 in Melbourne, Australia. The proposed dates are June 16-21, 2019. The organizing committee are Emanuele Viterbo and Parastoo Sadeghi. The TPC chairs are Sundar Rajan, Michael Gastpar, and Emina Soljanin. The venue is the Melbourne Convention and Exhibition Centre. The registration fee for IEEE IT Society members (advance) is 950 Australian dollars or $732. The Melbourne Convention Bureau will provide guaranteed funding for the conference. Emanuele emphasized the multicultural, safe, and friendly nature of Melbourne, as well as the strong capabilities of the venue.

Al Hero presented the proposal for ISIT 2019 in Paris, France. The proposed dates are July 7-14, 2019. The organizing committee are Al Hero and Pablo Piantanida. The TPC chairs are Giuseppe Caire, Venu Veeravalli, Aaron Wagner, and Gilles Zemor. The venue is in the center of Paris: Maison de la Mutualite on the Left Bank. The registration fee for IEEE IT Society members (advance) is 750 euros. The total cost is estimated to be 608,278 euros, with a 10% surplus. Al emphasized the high accessibility, strong attraction of Paris, as well as the vibrant IT community in the city.

The Online Committee requests $45k to implement a major revision of the website and better communication. This would be in addition to the currently budgeted amount of $20k.

Motion: To approve $45k for redesigning the ITSoc website and correspondence. Motion was passed.

A discussion followed. It was proposed that previous schools and workshops be archived on IT website. It was suggested that the project could request money from the IEEE $1 million fund. However, this is only possible if the 50% initiative fund is rst exhausted.

7. Aylin Yener presented the Schools Subcommittee report. The current members are the committee are Alex Dimakis, Stark Draper, Michael Gastpar, Gerhard Kramer, Young-Han Kim, and Aylin Yener. The school subcommittee has the continuing goal of helping and facilitating the organization of summer/winter schools of information theory over the world. The committee aims to reach out to potential organizers, help with the preparation of the school proposals and recommendations to the BoG. The following Information Theory Schools are taking place in di erent parts of the globe in di erent parts of this year: (1) North American School of Information Theory (NASIT), August 2015; (2) South African School, August 2015; (3) Indian School (JTG/IEEE), July 2015; (4) East Asia (Hong Kong) School, June 2015; (5) European School of Information Theory (ESIT), April 2015.

Some brief updates. UCSD is organizing NASIT this year. The organization is on track with advertising emails sent. The society support level for NASIT is 20k. The East Asia (Hong Kong) School has applied and acquired substantial funding from the Croucher Foundation. Hence they no longer need the 15k support the BoG approved for them last year.

Jasper Goseling presented the report on the 2015 IEEE European School of Information Theory, which took place in April 20-24, 2015, in Zandvoort, The Netherlands. The organizing committee are Jasper Goseling (University of Twente), Tanya Ignatenko (Eindhoven University of Technology), Jos Weber (Delft University of Technology), and Frans Willems (Eindhoven University of Technology). The program included tutorial lectures by Stephan ten Brink, Imre Csiszar, Richard Durbin, Young-Han Kim, Michael Langberg, and Stephanie Wehner, poster sessions by students, and presentations on applications and entrepreneurial aspects of Information Theory. There were 89 students and postdoc participants (a record number for ESIT). The school ended with a small surplus.

The school committee has received two proposals so far for 2016: NASIT from Duke and the Australian School of Information Theory from Melbourne.

Gerhard Kramer presented the proposal for the 2016 NASIT at Duke University. The organizers are Henry P ster, Rob Calderbank, Galen Reeves, Dror Baron, and Matthieu Bloch. The school is to take place June 7-10, 2016 in Durham, NC. The program consists of ve two-hour lectures and three poster sessions. Lecture topic ideas include sharp thresholds for boolean functions, advances in random coding bounds, information theory and concentration, and fundamental limits of MIMO. The estimated total cost is $46k. The organizers request funding support at $20k from ITSoc.

Motion: To approve funding at $20k for the 2016 North American School of Information Theory at Duke University in Durham, NC. Motion was passed.

Emanuele Viterbo presented the proposal for the 2016 Australian School of Information Theory at Monash University in Melbourne. The school will take place January 17-19, 2016. The general chairs are Emanuele Viterbo and Jamie Evans. The program consists of four lectures and an early-career development session. The target attendance is 50 students. The IEEE Australian Communication Theory Workshop (AusCTW)

will be held immediately following the IT School from January 20-22, 2016, at the same venue. The school requests ITSoc funding at $15k. This amount will be used to support speaker travel to Australia as well as scholarships to students with nancial need.

Motion: To approve funding at $15k for the 2016 Australian School of Information Theory at Monash University in Melbourne. 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 June 2015. The Board currently consists of 45 Associate Editors (AEs). Some further expansion of the Editorial Board is planned. Particular needs exist in compressive sensing and statistics.

The EiC requests approval of the appointment of Xiaohu Tang as Associate Editor for Sequences, and the appointment of Helmut Bolcskei as Associate Editor *pro tempore*.

Motion: To approve the appointment of Xiaohu Tang as Associate Editor for Sequences, and the appointment of Helmut Bolcskei as Associate Editor *pro tempore*. Motion was passed.

Frank then presented some statistics. The number of papers submitted to the Transactions appears to have increased (about 10%) over the past year. The page budget for the Transactions in 2015 was 8500 pages. The actual page count until July was 4120. Frank presented the acceptance and rejection rates in the past 12 months, in overall terms and by editorial area. The fast rejection rate (decision taking fewer than 30 days) is about 15%. Excluding decisions made within 30 days, the median time to rst decision is 174 days (the overall median is 157 days). The rst decision is reached within one year in 89% 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. One current AE is struggling. Some papers were recently re-assigned to other AEs, including our new AE pro tem.

Frank mentioned that there have been 11 appeal cases since January 2014. Nine have been decided (upholding AE decision in all cases). Two are currently in progress. In our case, the author appealed to the IEEE, with the outcome that the author was allowed to re-submit and receive another set of independent reviews, currently in progress.

Frank requested feedback on the editorial board structure. The EiC job is heavy (requiring one to two days per week on average). There are two models for splitting the job. In the Area Editors model, six area editors are appointed, each managing 7-8 editors. This model has been adopted by *IEEE Trans. on Automatic Control, IEEE Trans. on Communications, IEEE Trans. on Wireless Communications*. The model was proposed by the 2006 Transactions review committee chaired by A. Vardy, and by the 2011 Transactions review committee chaired by A. El Gamal. In the Shift Register model, the current EiC job is split into two: the EiC, and the \past-EiC." The EiC is responsible for day-to-day paper handling, dealing with authors, reporting to the BoG, and interacting with ScholarOne. The Past-EiC is responsible for production of issues, handling appeals and certi cates of appreciation, and interacting with the IEEE

Production Portal. Together, both people invite new AEs, write reports, etc.

Finally, Frank discussed the possibility of organizing a special IT Transactions issue on the Shannon Centenary. The idea is to reprint some of the prize-winning or key papers from recent years. Feedback is sought on this suggestion.

9. Helmut Bolcskei presented the report of the External Nominations Committee (ENC). The members are Michelle E ros, Andrea Goldsmith, J. Nicholas Laneman, Paul H. Siegel, and Sergio Verdu. The committee is responsible for nominating ITSoc members for IEEE medals (e.g. Bell, Hamming, Founders), paper awards (Baker and Fink), IEEE Field Awards (e.g. Sumner, Kirchmayer, Fourier), and other major awards: Marconi, BBVA, Dobrushin, Queen Elizabeth, Japan Prize. Helmut mentioned some challenges faced by the committee, including the di culty of getting people to nominate, the long queues associated with most major awards, lobbying university presidents to put forward nominations for major awards, mechanisms for exchanging information between the IT paper award committee and the ENC, and de ning how the information from one year is passed on to the next.

10. Christina Fragouli presented the report of the Broader Outreach/Shannon Centennial Committee. The Committee members are Michelle E ros, Sergio Verdu, Ruediger Urbanke, and Christina Fragouli (with help from Greg Wornell, Emre Telatar, Daniela Tuninetti, Alon Orlitsky, Muriel Medard and others). The main goal is public outreach. Activities include a documentary, centennial celebrations, IEEE milestone, web presence, etc.

The planned lm on Shannon has a director/producer Mark Levinson (producer of the award-winning documentary \Particle fever), with co-producer Sergio Verdu, and area expertise consultant Tonia Barber. The selection of the executive producers is still in discussion. The approximate budget for the lm is $650,000 (estimate by Mark Levinson). The IT Society has granted $25,000 for the lm (to be used for rst steps such as script). An NSF proposal has been submitted, which requests $300,000 through the IEEE Foundation. Another proposal will be submitted to the Swiss NSF, requesting $50,000. The remaining funds will come from private donors, industry, other IEEE Societies and Foundations (such as the Sloan Foundation).

The IEEE Foundation Account for Solicitation for Charitable Gifts for Claude Shannons 100th Birthday Celebration is being coordinated by Michelle E ros and Daniela Tuninetti. Steps for its approval include: (1) seeking permission to solicit donations (IEEE BoD approved on May 28), (2) requesting establishment and management of fund (IEEE Foundation meeting on June 19) and (3) review by IEEE Finance Committee (June 18). The Centennial activities will target local communities and the university population. Several universities have expressed interest. The Committee will approach more and encourage volunteer institutions. Materials and ideas will be collected and shared. $10k will be allocated for the IT Society for logo/website/poster design, and commemorative gifts.

The meeting was adjourned at 5:35 PM.