

## IEEE Information Theory Society Board of Governors meeting minutes

UCSD, La Jolla, 02.06.2011, 1-6pm

Natasha Devroye

**Present:** Giuseppe Caire, Muriel Medard, Bruce Hajek, Gerhard Kramer, Nihar Jindal, Natasha Devroye, Andrea Goldsmith, Frank Kschischang, Abbas El Gamal, Alex Vardy, Al Hero, Emanuele Viterbo, Prakash Narayan, Aylin Yener, David Tse, Hans-Andrea Loeliger, Sriram Vishwanath, Paul Siegel, Emina Soljanin, Alex Grant (Skype for first 30 minutes), Matthieu Bloch, Michelle Effros, Sergio Verdu, Rolf Johannesson, Li Ping, Max Costa.

The meeting was called to order at 1:38pm by the Information Theory Society (ITsoc) President, Giuseppe Caire, who welcomed the Board of Governors (BoG).

1. The minutes of the BoG Meeting on 9/28/2010 at Allerton were approved.
2. The agenda was approved.
3. Giuseppe Caire presented the President's report: newly elected board members and officers were welcomed, outgoing board members were thanked, and ITsoc members that were elected IEEE Fellows were congratulated.

Giuseppe Caire reported that the society is in great financial health, that the IEEE Transactions on Information Theory continue to be of high technical quality, that the conferences and workshops organized ran flawlessly, and that the society is an IEEE leader in terms of its member services.

Of the many on-going initiatives in 2011, the president selected one to highlight – to reduce the submission-to-publication (sub-to-pub) time for the IEEE Transactions on Information Theory. An important step in this direction was the recent switch to ScholarOne. The president will work with the editor in chief and editorial executive board on reducing the sub-to-pub time.

Giuseppe Caire's first objective as incoming president is to "do no harm." Other new action items include:

- Increasing ITsoc presence in IEEE wide strategic initiatives such as the IEEE SmartGrid Forum.
- Exploiting financial surpluses, and finding a way to guarantee long-term funding of the IT schools.
- Closely following the IEEE Technical Activities Board (TAB) discussion on Open Access. Giuseppe Caire plans to promote the "physics model" already being practiced by the IT society members through the usage of arXiv.
- Preparing for the 5 year review.

Giuseppe Caire thanked Frank Kschischang for leaving the society in such an excellent condition.

4. Division IX Director Al Hero presented his report: he explained IEEE organization and where the ITsoc stands in Division IX – the "Signals and applications" division. He explained the role of the TAB: to monitor societies, spread good practices, and approve budgets. TAB is interested in suggestions for how to make IEEE more cohesive. How the societies are split into the various divisions (e.g. signal processing, control, information theory societies) was discussed, and Al Hero was open to making suggestions at the

Board of Directors meetings regarding how to better split the societies (e.g. why are we in a different division than control).

Al Hero reported on the IEEE: 70% of IEEE revenue comes from publications and conferences, IEEE has about 405,541 members and about 100,000 student members. Student membership has drastically increased in the past 10 years, but retention (i.e. after they graduate) remains challenging.

Al Hero reported on ITsoc membership: it is international, with increases in membership from India, Japan, UK, South America and decreases in membership in the US. This decline in US membership may be partly due to the availability of IEEE Xplore through many US universities.

Al Hero reported that the following are topics of current IEEE interest:

- how to deal with the IT society's decline in membership
- whether Open Access (making publications freely available) will kill societies, who depend on revenue from publications
- new IEEE products: the IEEE is pushing to make their primary product – information – available on different electronic media
- new IEEE initiatives such as the smart grid, cloud computing, life sciences, and humanitarian activities (EPICS, South Africa wind project)

A discussion was started on Open Access. Andrea Goldsmith asked Al Hero to clarify the concern that Open Access would kill societies – what is Open Access, what is concern, and what is IEEE doing to mitigate this? Al Hero, a strong believer in Open Access, stated that it is viewed as a threat to the societies, as when publications are made free, the provider becomes irrelevant. He believes we are currently in a transition period where we can post work on arXiv without affecting IEEE yet as libraries still purchase IEEE Xplore as they do not realize that we have substantial access already. He believes in the future IEEE will be a manager of Open Access rather than a (for pay) provider of publications. Nihar Jindal asked whether NSF will take the lead of NIH regarding Open Access? Al Hero stated that there is no indication of this yet, and it has been a year since White House initiated a call to action essentially requiring the adoption of Open Access. IEEE is currently de-facto “Open Access friendly” in that it allows authors to openly publish their work in other places. IEEE performed a study on the cost of Open Access, and concluded that it would cost about \$3,000–4,000 or so per paper to make it completely available to all. It was asked whether this could be written into NSF proposals. It was concluded that Open Access is one of the biggest open and active issues for IEEE, and input is sought. There is still much uncertainty, but Al Hero believes Open Access should be embraced rather than ignored.

5. ITsoc treasurer Nihar Jindal reported on the ITsoc's excellent financial health.

The end of year forecast for 2010's operating surplus is +\$263,000, which is \$241,000 more than budgeted. The society made over \$100,000 surplus on conferences.

Nihar Jindal asked whether the society wants to consider ways of using the surpluses, exploring the use of mechanisms other than putting it into the bank. One suggestion was made to put money in IEEE foundations in order to access it over a longer term to support events such as the successful IT schools. Nihar Jindal will explore this IEEE foundation possibility.

Nihar Jindal highlighted that while IEEE downloads are increasing, IEEE Transactions on Information Theory downloads are decreasing. The IEEE Transactions on Information Theory are still the 13th most downloaded publication, but this may be something to keep in mind for future years given our publication-dependent revenue.

Abbas El Gamal asked why we have more than \$100,000 surplus on conferences, and why they are not made more affordable instead. Giuseppe Caire responded that the IEEE guidelines suggest budgeting for 10% profit, and that due to effective organization, the actual profits are often closer to 20%. Giuseppe Caire believes that going below 10% surplus is dangerous, and suggests that we devise smart ways of using the surplus cash instead. Abbas El Gamal asked whether we can create an endowment? Al Hero responded that during the recent financial crisis it was forbidden to transfer cash to IEEE foundations and that this has not yet been reversed by the IEEE due to legal issues involved with being a non-profit organization. Before July, societies could make a donation that would serve a specific purpose, to be taken out at a later date such as for example the Padovani lecture endowment. This appears to no longer be possible but should be monitored and discussed in the future. Al Hero will convey the ITsoc's interest in IEEE foundations to the IEEE.

6. Membership and Chapters committee report was given by Gerhard Kramer.

The 2011 members were outlined.

The 2011 Schools of Information Theory were outlined:

- 2011 Taiwan Winter School, in January, organized by S. Moser
- European Winter School, in Barcelona in March, organized by A. Lozano and X. Mestre
- North American School, at UT Austin in May, organized by S. Vishwanath and T. Liu
- Wireless Summer School, in Oulu in July, organized by M Juntti

The Padovani Lecturer for 2011: Richard Baraniuk was approved by Roberto Padovani and the Committee. Andrea Goldsmith believes requiring Roberto Padovani's approval of the chosen lecturer sets a bad precedent. Gerhard Kramer replied that this approval was meant as a courtesy rather than a true question, but was amenable to Andrea Goldsmith's suggestion to inform rather than request approval of the selected Padovani lecturer from Padovani in future years.

Gerhard Kramer outlined the Distinguished Lecturer program and encouraged the BoG and various chapters to make use of these excellent lecturers.

Gerhard Kramer raised issue 1: does BoG need to approve the Schools of IT? The North American School of IT is the society's 3rd largest event in terms of attendance and budget (following ISIT and ITW), and has the Padovani Lecture associated with it. It was agreed that the requirement for BoG approval be limited to funding and technical co-sponsorship requests.

Gerhard Kramer raised issue 2: should the School of IT always be registered with IEEE as a conference? In 2010 it was registered to move financial liability from the organizers to IEEE and the ITsoc. This was useful in shaping some contracts (e.g. dorms), and was not much work. Gerhard Kramer thus recommended that a School of Information Theory with a large budget and attendance be registered as a conference with the IEEE. He also noted that in the paperwork for previous years, the organizers made clear that the School

was not seeking to make a profit (rather, it is subsidized), which does not align with the usual 10% profit IEEE recommendations. This appeared to be fine by IEEE.

Gerhard Kramer raised issue 3: school attendance. In November 2010, the BoG approved the motion That students attending the IT Summer School must be members of the Information Theory Society, which goes against the ITsoc constitution which says (Article VII, Section 2): “Meetings, conferences, symposia or conventions of the Society shall be open on an equal basis to all members of the IEEE.” The question of how to formulate our policies for IT School attendance was discussed at length. Issues that were raised included: whether we want the dominant attendees of the school to be students, whether non ITsoc students should be supported, whether allowing non-student people from industry to attend would interact with the value of tutorials at ISIT (which they could essentially get for much less \$ at the IT School), and how to structure the registration fees with regard to members / non-members of IEEE and/or ITsoc.

Andrea Goldsmith moved “That IEEE Information Theory Society Student Members attending the IT Summer School have their registration (or other) fees reduced.” The Board approved the motion.

Alex Vardy proposes a motion to strike down the November 2010 motion “That students attending the IT Summer School must be members of the Information Theory Society” in a spirit of regret. Sergio Verdu proposed a motion to have the just passed motion “That IEEE Information Theory Society Student Members attending the IT Summer School have their registration (or other) fees reduced.” override the November 2010 motion “That students attending the IT Summer School must be members of the Information Theory Society.” This motion was approved.

7. Muriel Medard reported on the Outreach Committee on behalf of Todd Coleman and Christina Fragouli. In short, there was a mentor breakfast, and WITHITS lunch activities going on at ITA. A full report is to be given at the next BoG meeting. Aylin Yener and Christina Fragouli will work together on future joint Student Committee and Outreach Committee events.

8. Andrea Goldsmith reported on the Nominations and Appointments Committee: she provided an overview of its members and responsibilities.

Regarding the Wyner Award Selection Committee: since it is relatively new there are few former winners to appoint. A bylaw change from last year was made: the 1st VP is no longer ex-officio, and one additional member and former winner are now also required.

The implementation of staggered 3-year terms for the Fellows Committee was completed.

Andrea Goldsmith made the following suggestion: after the fall elections presidents should canvass new and ongoing BoG members about their committee interests in order to ease staffing of these committees. Alex Vardy said he has a list of past editors in chief which he will pass on (useful for the Shannon Award Committee staffing).

Andrea Goldsmith proposes to change the Fellows Committee formation date from October 1 to something later than Dec. 15.

Andrea Goldsmith noted that the staggered 3-year terms has worked well – adding this to the bylaws could be considered.

Andrea Goldsmith stated that the Student and Online Committee are not yet standing committees, but already act like them. Giuseppe Caire is in favor of adding these to the standing committees. Motions

need to be formulated about this.

Andrea Goldsmith suggested recommending ITsoc members for awards outside of the society such as the Baker prize for the best theory paper as the BBVA Award. She questioned how to staff the non-IEEE awards committees – under the Awards Committee, or through separate committees? Gerhard asked whether we should advertise the Baker prize so general members could make nominations?

9. Giuseppe Caire presented the report on the 2010 Fellows Committee on behalf of Frans Willems. He suggested that the BoG take a look at the short slide online; there are no surprises.

10. Matthieu Bloch reported on the Online Committee: Nicholas Laneman drove the website design in the last 4 years and deserves a great deal of credit. The website is up and running smoothly and for the first time is seeing a stabilization in the number of visits. Most visitors to the ITsoc website view the information for authors, IT schools, upcoming conferences, and news pages. Matthieu Bloch's hope is that the website will replace the mailing list as the main source of information, allowing the mailing list to become a digest. The website has many convenient features, including the ability to host conference websites. He hopes that in future years ITW will use the ITsoc website rather than other domain names, and noted that ISIT already dangles off of the ITsoc site.

Giuseppe Caire asked about the ability to host videos on the ITsoc website. Matthieu stated that their original idea was to host videos through another service (e.g. YouTube or Vimeo) and embed them into the website. However such sites seem to limit the size of videos to 10 minutes each (universities are exempt). Giuseppe Caire believes this issue is resolvable (e.g. cut into shorter, linked blocks); Matthieu Bloch will report back on progress.

Matthieu Bloch will post clear guidelines on how to post announcements on the ITsoc website.

11. Aylin Yener reported on the Student Committee:

- ISIT 2010 event 1: roundtable research discussion with student leaders. Lunch was provided, T-shirts were distributed.
- ISIT event 2: a panel on “recipes for a good talk”, lunch was provided. The panelists were thanked.
- For some of these student events, the rooms booked were too small – while 120 students attended, 40 had to be turned away. In future years, Aylin Yener suggests making sure that large rooms are booked for these popular student events.
- At Allerton 2010 a new event was introduced – Information Theory Jeopardy, which about 25 students attended. The Student Committee is thinking of trying it again with participation from faculty, who are encouraged to collectively make fools of themselves.
- The Student Committee is talking to the Outreach Committee about joint events in the future.
- The Student Committee wishes to thank Bobak Nazer for his service.
- Aylin Yener thanked the ITsoc for their support of the School of IT in past years. She and Gerhard Kramer are handing off the School of IT organization to the next generations. The North American School of Information Theory is to be held at UT Austin over memorial day weekend in 2011, and will be organized by Sriram Vishwanath and Tie Liu. The instructors will include Richard Baraniuk, Bob Gray, Sanjoy Mitter, and Emre Telatar. The enthusiasm about the school is spreading, and many international schools are popping up.

Max Costa asked about the requirements for starting a school of information theory: is a chapter needed? Are certain requirements to be met? Aylin Yener and Gerhard Kramer replied that nothing is formally needed except time and initiative. If the Student Committee becomes a standing committee, its relationship to the Schools of IT should be made clear. Giuseppe Caire believes that the Student Committee should be involved in the content (e.g. choosing and inviting lecturers), and that the Chapter and Membership Committee should be more supervisory. The Committees could be more involved if technical co-sponsorship and financial help is requested. Gerhard Kramer suggests putting instructions on how to run successful Schools of IT online, but is supportive of the distributed approach to the IT school which relies largely on local enthusiasm.

Giuseppe Caire, on behalf of the BoG, thanked Gerhard Kramer and Aylin Yener for their commitment to the School of Information Theory. The BoG applauded their efforts.

Gerhard Kramer spoke about the School of IT held on Jan. 17, 2011 in Taiwan. Stephan Moser organized this small one day event. It was an excellent small, local initiative.

13. Sriram Vishwanath spoke about 2011 North American School of IT. He thanked Gerhard Kramer and Aylin Yener for bringing the School of IT so far. He outlined the plans for the 2011 summer school:

- free lodging at UT Austin (in contrast to previous years). It will act as a hotel with a credit card provided to reserve the room (but not charged). No cheques to/from students as in past years.
- May 27-30 to overlap with Memorial Day
- website is up, with logistics outlined
- change in structure: 2 long core information theory and coding lectures, and 3 medium applications and interdisciplinary lectures.
- Statistics on new versus old students will be tabulated.
- Try to accept / accommodate everyone. They currently have 230 dorm rooms. Last year there were many last minute cancelations.

A motion to sponsor the 2011 North American School of Information Theory for \$20,000 was made. A motion to increase this to \$25,000 was made and approved unanimously.

14. Sergio Verdu reported on the Publications Committee: Helmut Bolcskei expects to present a plan of action at the BoG meeting in August 2011 at ISIT in St.Petersburg. He is making a huge effort to reduce the increasing sub-to-pub times and reports that less than professional behavior is prevalent, and actually worsening. For example, numerous prolific authors reject all review requests, and many ping-pong papers without taking decisions. Sergio Verdu stated that we are fortunate to have Helmut Bolcskei take such a serious look at these problems.

The policy on previous publications was outlined online, and states that:

Contributions should comprise novel and previously unpublished material; however, prior publication in conference proceedings or portions of the material shall not preclude publication in this journal when such prior or concurrent publication is referenced in the paper

itself at the time of submission. If authors submit a nearly verbatim copy of a prior conference publication, they should indicate to the editors in a cover letter why they believe that such resubmission is warranted. Editorial decisions will take into account previous dissemination of the submitted material.

Hans-Andrea Loeliger suggests that the last sentence be re-worded to “publication” rather than “dissemination”, as arXiv postings are often verbatim copies of IEEE Transactions on Information Theory submissions. This change would not discourage authors from posting on arXiv. A few years ago, a discussion was had on the policy of verbatim submissions / re-publications of work. No conclusion was made then. Should the BoG decide that verbatim submissions (e.g. from ISIT papers) are permitted, it was suggested that this be clearly worded.

Helmut Bolcskei is successfully recruiting more senior associate editors, which is not an easy task. It was particularly hard to find associate editors in certain fringe areas, where the IEEE Transactions on Information Theory is not the central publication venue, and hence many of the selected associate editors publish the bulk of their work elsewhere. It was suggested that the IEEE Transactions on Information Theory may want to consider changing their focus. Frank Kschischang suggests selecting only associate editors that make IEEE Transactions on Information Theory their publication home. As a whole, the board hopes to clarify the scope of the IEEE Transactions on Information Theory. For example, Abbas El Gamal questions the presence of machine learning in the Transactions.

Motion to approve Alexei Ashikhmin as associate editor for the IEEE Transactions on Information Theory – Coding Techniques was unanimously approved.

Motion to approve David Burshtein as associate editor for the IEEE Transactions on Information Theory – Coding Techniques was unanimously approved.

Motion to approve Nicolo Cesa-Bianchi as associate editor for the IEEE Transactions on Information Theory – Coding Techniques was unanimously approved.

Motion to approve George Moustakides as associate editor for the IEEE Transactions on Information Theory –Detection and Estimation was unanimously approved.

Motion to approve Yasutada Oohama as associate editor for the IEEE Transactions on Information Theory –Source Coding was unanimously approved.

In appointing associate editors, the BoG agreed that it would be useful if there was a mechanism for reporting less-than-professional behavior to the Editor in Chief, which would aid in making associate editor nominations.

15. Muriel Medard reported on the Awards Committee: she outlined the members and the committee’s main responsibilities: the joint IT/Comsoc Paper Award, the IT Paper Award, the ISIT Student Paper Awards, and the Baker Prize.

Regarding the joint IT/Comsoc Paper Award – the IT and Communications societies take turns leading the process. When ITsoc leads, nominations are due March 1; when the Communications society leads, the nominations are due on Feb. 15, which aligns with all other Comsoc paper awards. Muriel Medard suggests having a single deadline which does not change depending on who is leading. Andrea Goldsmith encourages pushing for a later deadline to allow more time for nominations. A discussion was held about

where to put this deadline and it was agreed that the BoG would like both the IT and joint IT/Comsoc Paper Award nomination deadlines to March 1. Muriel Medard will make a request to the Comsoc to change the deadline to March 1.

Regarding the IT Paper Award – there are numerous discrepancies on the web about the 2 year versus 3 year nomination window and nomination dates. These should be resolved.

Gerhard Kramer asked whether the IT/Comsoc nominations are automatically considered for the IT Paper Award? Muriel Medard responded that these two awards are run separately, but that the chair of the committee for one award could approach the nominee if they believe the paper is more suited to the other award. Papers may also be nominated for both.

Regarding the ISIT Student Paper Awards – at future ISIT meetings the committee will try to schedule all finalists between Monday and Thursday. The committee – composed of the entire Awards Committee – will meet on Thursday before the banquet; if there is a clear decision the announcement will be made at the banquet, otherwise it will be announced later. In future years, it was suggested that the guidelines for the number of papers to be recognized be followed: in the bylaws up to 3 papers may be recognized, but in 2010 this was not enforced.

Regarding the Baker Prize: Andrea Goldsmith and Dave Forney were instrumental in resurrecting this prize, a prize that spans multiple societies and considers papers published 3-5 inclusive years ago that have already been awarded, as well as others that are award-worthy. Frank Kschischang noted that the entire BoG should look at paper awards. Muriel Medard, chairing the Awards Committee is worried about over-taxing the awards committee with this additional award. A suggestion was made to have the whole committee be involved in the Baker Prize nomination as its nomination deadline falls later than the others, on July 1, 2011.

16. Bruce Hajek reported on the Conference Committee.

The ISIT 2010 in Austin books are nearly closed, and a surplus of \$105,000 is estimated

ISIT 2011 in St. Peteresburg:

- Concerns were expressed about the visas: various issues such as that passports have to be valid for 6 months after you leave Russia, that the exact arrival and departure dates / travel itinerary must be known in advance, and that you need a visa letter (from conference organizers or hotel) must be made clear to ISIT attendees. There are several good websites about Russian visas.
- Regarding the visa letter: this is the responsibility of the local organizers. The BoG wishes to emphasize the importance of timely visa letters, and hopes that the local organizers will start planning for this immediately. The BoG recommends tourist visas rather than business visas.
- Rolf Johannesson brought up the issue of visa waivers, which would greatly simplify the travel arrangements of ISIT participants. Reference was made to <http://eng.news.kremlin.ru/transcripts/1381>, which covered the elimination of bureaucratic barriers on the way to technical modernization of Russia. The BoG moved to request Evgenii P. Velikhov's support in obtaining a visa waiver for ISIT 2011. This motion was approved unanimously.
- The Feb.15 ISIT deadline is firm.
- The BoG moved to provide a loan of \$5,000 for posters at ISIT, which was approved.

A motion to approve a loan of \$60,000 for ISIT 2012 in Cambridge / MIT was unanimously approved.

ISIT 2013 to be held in Istanbul is coming along. Nothing to report.

A motion to approve a loan of \$30,000 for downpayments for ISIT 2014 to be held in Hawaii was unanimously approved.

A proposal to hold ISIT 2015 in China / Hong Kong is expected for the summer of 2011 (next BoG).

The ITW 2010 in Cairo made a profit of \$18,000. The organizers have made a proposal for a winter School of Information Theory.

The Conference Committee is awaiting the final ITW 2010 in Dublin report.

A motion to approve a loan of \$15,000 for ITW 2011 in Paraty, Brazil was unanimously approved.

There is a new proposal for ITW in Lausanne at the end of 2012, with general chairs Christina Fragouli and Emre Telatar, and program chairs Suhas Diggavi and Rudiger Urbanke. Three special topics will be emphasized: "Recommender Systems' Algorithms and Analysis," "Secrecy and Privacy in Networks," and "Biology." Registration was proposed to be 650 euros for IT members for a 5 day workshop. The BoG generally perceived 650 euros to be high for a workshop and suggests cutting this by 25%. The BoG also expressed concern about the odd topics in which the organizers have little expertise and recommend that the very broad "Biology" topic be narrowed down. There was a motion to approve this workshop proposal; not approved due to the above concerns.

A motion to approve technical co-sponsorship of ITA 2011 with IEEE Xplore access was approved.

A motion to approve technical co-sponsorship of Allerton 2011 access was approved.

A motion to approve technical co-sponsorship of a Wireless Information Theory Workshop/Summer School to be organized in Oulu, Finland just before ISIT 2011 was approved.

The 2nd IEEE International Conference on Smart Grid Communications (SmartGridComm) <http://www.ieee-smartgridcomm.org/> requests technical co-sponsorship. Giuseppe Caire recommends waiting to vote until the official request has been made, then voting over e-mail.

Bruce Hajek encouraged members of the BoG interested in serving on the Conference Committee to contact him.

17. It was proposed to have the 3rd BoG meeting of 2011 at ITW in Paraty, Brazil from Oct.16-20, 2011. Max Costa is in favor of having the meeting in Paraty, in line with the tradition of having it at ITW every other year (BoG was held at the ITW in Taormina in 2009). Concern was raised that Paraty is a 3-4 hour drive from Sao Paulo and Rio de Janeiro. Vans will be on standby in Paraty to leave for the airports. Alex Vardy recommends that the BoG supports ITWs by showing up at these meetings. A concern was expressed about sufficient attendance.

18. Giuseppe Caire recommends that the annual BoG be held on Sunday July 31, right before ISIT 2011.

19. There were no other issues.

The meeting was adjourned at 6:20pm.