

Information Theory Society Student Committee Report by Andrea Goldsmith

*IT Society BOG Meeting
March 14, 2007
CISS Conference, Baltimore MD*

Committee Chair: Andrea Goldsmith (outgoing), Sergio Servetto (incoming)
Student Co-Chairs: Ivana Maric and Brooke Shrader
Volunteer Coordinator: Lalitha Sankar
Website Coordinators: Cong Shen
Webmaster: Amin Mobasher

The main student committee activity since the last BOG meeting at Allerton'06 was soliciting student suggestions for a new committee chair, planning for the CISS round table research discussion which took place earlier today, planning for the panel and round table research discussion at ISIT, and planning for a new initiative to generate summaries of landmark papers to be published on the student website and possibly the IT newsletter.

New Committee Chair: Andrea Goldsmith announced at the last BOG meeting her desire to step down as student committee chair before ISIT'07 since it would conflict with her 2nd VP duties there. She subsequently asked the students to suggest a replacement, and they overwhelmingly selected Sergio Servetto to take over this role. Sergio has been involved with the committee since its inception, and is a natural choice to take over the committee leadership. This proposal was made to the IT president and approved. Sergio will officially begin the new chair position after CISS, but has already been involved in planning activities for CISS and ISIT.

Annual Events: As reported at the last board meeting, the committee has converged on holding the following events on an annual basis (2006 was the first cycle):

CISS (spring): 1 event; a research round table lunch and discussion

ISIT (summer): 2 events; a research round table lunch and discussion, and a student committee lunch meeting and panel discussion.

Allerton (fall): 1 event, a panel discussion (lunch or evening)

Recent Events:

CISS'07 Research Round Table: A research round table discussion is planned for lunch on Wednesday March 14 at CISS. There will be 6 discussion leaders in the following topic areas Joint source-channel coding for wireless networks, Convex optimization applications, Detection and estimation, Distributed source coding, Security and cryptography. Lunch is provided and attendance is expected to be around 50-70 students.

Allerton'07 Panel Discussion: A panel discussion was held at Allerton on September 27, 2007 just after lunch. The panel was entitled "Frying Pan or Fire: To Postdoc or Not",

with panelists consisting of current and former postdocs Ivana Maric, Bruno Sinopoli, Grace Liu, ... The panel was attended by about 35 students and was viewed very positively, although more time for questions would have been valuable. The logistics of the panel were a bit more difficult than at CISS and ISIT, as we were not allowed to advertise the panel on the conference website and we could only get space in the Visitor's Center, which is far away from where the lunch is served and the main sessions held. The time was also compressed since students had to eat lunch in the Allerton dining area before the panel, and also the session in the Visitor's center ran late, so we could not set up right away. In general we would prefer to serve lunch at the panel, but it's not clear if this is possible to do at Allerton. It might be better to have the panel one evening instead of at lunch (this was done for the first student committee panel at Allerton in 2005), since more space is available (we used the library for that panel) and time is not an issue. Some of these different options should be explored for the 2007 Allerton panel.

ISIT'06 Research Round Table and Panel: Two events were sponsored at ISIT'06: a research round table discussion as well as a student meeting and panel. Both events were heavily attended and highly successful by all measures. This was the first round table research lunch. Five topics were covered: MIMO Broadcast Capacity and Space-Time Coding; Capacity with Feedback; Cooperation and Relaying; Network Coding; and Secrecy System Capacity. Each table had 1-2 students acting as discussion leaders, and key papers in each topic were posted on the web in advance. About 80 students attended the event. The student meeting at ISIT was held on Thursday at lunch, with a panel on "How to Choose, Formulate and Solve an Information Theory Problem" with panelists Rob Calderbank, Tom Cover, Michelle Effros, Tony Ephremides, Ralf Koetter, and Alon Orlitsky. Free T-shirts and lunch were offered to all attendees as well. Attendance was around 350 people, probably not all students, and more than double our expected attendance. In fact, the panel was the largest event at ISIT outside the plenary sessions and Shannon lecture. The panel was taped and the recording posted to the student website.

Student Website: In addition to the conference events, we believe the student website is a very important resource for students. We have updated some of the content, including the "Getting started in research" area. We hope to work closely with Nick Laneman to leverage some of the flexibility and new initiatives he is launching for the society website in the student website.

Best ISIT Student Paper Award: The student best-paper award was approved for ISIT'07 on a trial basis. The TPC chairs for ISIT'07 have put in place a process for deciding on the awardee, which will be based on both technical contribution and presentation quality. If successful we hope this award will become permanent, and will be handled by the society awards committee.

New Initiatives: We are currently working on a new initiative for students to generate summaries of well-known landmark papers in IT. We are working with the newsletter editor Danielle Tuninetti to possibly publish the summaries in the newsletter. This initiative is just getting started and more about it will be reported at ISIT'07.