

Information Theory Society Student Committee Report by Andrea Goldsmith

*IT Society BOG Meeting
September 27, 2006
Allerton Conference, Monticello, IL*

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Student Co-Chairs: Ivana Maric and Brooke Shrader
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The main student committee activities since the last BOG meeting at ISIT'06 have been the two student events at ISIT'06, updating the student website with new events and tutorials, setting up a Yahoo discussion group for students, and preparing for student events at Allerton'06.

ISIT'06 Events: The two events held at ISIT'06 were a research round table lunch and discussion as well as a student meeting and panel. Both events were heavily attended and highly successful by all measures. The round table research lunch was a new event. For the lunch, five round tables were set up, each focused on one of the following research topics: MIMO Broadcast Capacity and Space-Time Coding; Capacity with Feedback; Cooperation and Relaying; Network Coding; and Secrecy System Capacity. The students could then chose the table they wanted to join for the discussion. 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, more than double the expected attendance, and the discussions were animated, lively, and quite intense. The committee got excellent feedback from students about the value of the discussions. The research topics and associated papers of the research round table have been posted on the student website. Th enthusiasm about the research discussions motivated the committee to set up a Yahoo discussion group for students to remotely discuss any topics related to IT. The discussion group has been established but has not seen much traffic yet, similar to the mailing list.

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.

Ongoing Events: We believe the overwhelming success of both student events at ISIT have satisfied the committee's goal of increasing the value of the society for students as well as to bring them together as a community. We plan to continue to have both events at every ISIT, as well as a panel at each Allerton conference, and a round table research lunch at each CISS conference. Allerton and CISS seem to be the conferences most heavily attended by students with an interest in IT, and thus we have targeted these conferences in addition to ISIT for our activities.

Student Website: In addition to the conference events, we believe the student website is a very important resource for students. We continue to brainstorm about addition features to incorporate into our website, but many of our ideas requires more volunteers to realize them. We had a long discussion with Nick Laneman, the new online editor, for ways to leverage his initiatives for the IT website with the student website. In particular, we would like to make it easier for students to post to the website. We also want our website to link to a posting of the plenary/Shannon lectures on the main site. Our webmaster will continue to work with Nick to improve the student website and help with the initiatives of the IT website.

Other Plans: We had proposed to the BOG a student best-paper award, and a proposal for this will be presented by the ISIT'07 TPC at Allerton. If approved and successful, we hope this will become a permanent award, most likely under the purview of the IT awards committee. We will also probably have another T-shirt logo contest next year. This was a fun and low-cost way to get students involved in the committee. The Yahoo discussion group could use some proactive participation, and we are considering various ways to do that.

Budget Issues: We believe that offering lunch at the student events has a significant impact on attendance. We would also like to offer free T-shirts to students that attend the ISIT student meeting, and possibly also the Allerton and CISS meetings. The cost of T-shirts at each meetings is about \$1200. The cost of lunch varies with the venue, at ISIT it is usually about \$15-\$20 for a boxed lunch (i.e. \$1500-\$2000 for 100 lunches at the research round table and \$3000-\$4000 for the panel assuming 200 attendees). Allerton we probably would not provide lunch but only refreshments since most student purchase lunch tickets and the logistics of supplying lunch are complicated. CISS we have not yet priced a box lunch for, but it would probably be around \$15 as well. The lunches may be covered by the conference (that was the case at CISS'06 and ISIT'06). We would like to ask that the society to cover the cost of lunches when not covered by the conference. We would also like the society to cover the cost of T-shirts at ISIT and perhaps other conferences. We have put in an initiative proposal to the IEEE for student activities, and some of these expenses may be covered if the initiative is approved.

New Initiatives: We continue to welcome new ideas for initiatives. However, we believe the number of student events we are planning for 2007 is the right number. Thus, new initiatives would mostly be focused on website development and remote interactions and participation.

Pictures from Round Table Research Lunch, ISIT'06

