

IEEE Information Theory Society Newsletter



Vol. 68, No. 3, September 2018

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ISSN 1059-2362

President's Column

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In my previous President's Column, I wrote that by the time you read this, it will be summer in the Northern Hemisphere. And what a summer! I hope everyone is safe during this unusually warm season.

We were lucky that our flagship conference International Symposium on Information Theory (ISIT) was in Vail, Colorado this year. While the temperatures were up during the day (outside and sometimes inside), we were able to enjoy cool Colorado evenings. One of the big highlights of this ISIT was the world premiere of "The Bit Player," the Information Theory Society's documentary about the life and work of Claude Shannon. The project was started in 2015 during Michelle Effros' Society Presidency as part of a broader outreach effort. It outlasted three Presidents (Michelle Effros, Alon Orlicsky and Ruediger Urbanke) and was completed earlier this year. The ISIT premiere also featured a Question and Answer Session with the writer, director and producer Mark Levinson and the actor John Hutton, and was followed by a champagne reception. The Society is working on a distribution plan for the movie, so stay tuned and continue to check your local theater listings!

In my last column, I also mentioned a few surprise award announcements would be made at ISIT. The first one was Andrea Goldsmith receiving the 2018 Aaron D. Wyner Distinguished Service Award. The announcement at the Awards Ceremony included a small puzzle consisting of the pictures of the more than 80 Jack Wolf ISIT Student Paper Award winners. Andrea has a long list of contributions to the society, and in particular it was through her leadership that the Jack Wolf ISIT Student Paper Award and the Student Committee were instituted.

The second surprise announcement was the winner of the 2018 Information Theory Society Paper Award, given to the three-part paper, "Information Transmission Using the



Nonlinear Fourier Transform, Parts I-III," by Mansoor Yousefi and Frank Kschischang that appeared in the IEEE Transactions on Information Theory in July 2014. The formal presentation will be done at next year's Awards Ceremony.

There were two more surprise announcements during the banquet. Siddharth Bhandari, Mehran Elyasi and Prathamesh Mayekar received the 2019 Jack Keil Wolf ISIT Student Paper Award. Details of the winning papers can be found on page 3.

The final announcement that held all of us in thrall was the 2019 Claude E. Shannon Award. Erdal Arikan, who invented polar codes which revolutionized coding theory, was announced as the winner. Polar codes are not only theoretically elegant, but also practical. In less than a decade of their invention, polar codes were adopted by the 5G cellular standard for control channel. Erdal's work has already been recognized by many prestigious awards, including the 2018 IEEE Richard W. Hamming Medal. I am very happy that Erdal will now be adding our Society's most coveted prize to his list of accolades.

ISIT is home to the annual meeting of the Society Board of Governors. During this year's Board meeting, we had a special session on Society values with respect to sexual harassment. In June, U.S. National Academies released a report on sexual harassment of women in academia. The report observes that "the most potent predictor of sexual harassment is organizational climate—the degree to which those in the organization perceive that sexual harassment is or is not tolerated. This means that institutions can take concrete steps to reduce sexual harassment by making systemwide changes that demonstrate how seriously they take this issue and that reflect that they are listening to those who courageously speak up to report their sexual

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harassment experiences." The goals of the Board session were to discuss recent events in our Society and how we can improve our own organizational climate with respect to sexual harassment. I am happy to report that the Board approved a statement strongly condemning sexual harassment, which you can find on page 25.

Our discussion continued in a specially organized morning session, which was announced to all conference attendees. Participants of this session, many of whom were young researchers, suggested steps we can take to create a society free of sexual harassment, bullying, and discrimination. We discussed double-blind reviews to reduce bias in our publications, creating a conference code of conduct and an ombudsperson position. One of the suggestions was to conduct a survey of IT Society members to better understand the incidence of sexual harassment and bul-

lying (recall that the results of a similar IEEE-wide survey was reported in the March Newsletter). Participants said that they would like to continue such discussions in future conferences, potentially in a time slot devoted to Plenary Talks.

After the Shannon Lecture, Urbashi Mitra invited all conference attendees to wear red and black ribbons to show our support of a community that embraces diversity: Applied, theoretical; industry, academic; geographic; and gender. Like Urbashi, "I wish to be part of an Information Theory Society that promotes the highest intellectual and professional standards." I hope you will join us and wear your virtual red and black ribbon to show our hope for such a society.

I am happy to hear from all of you; please feel free to contact me at elza@nyu.edu.