

# IEEE Information Theory Society Newsletter



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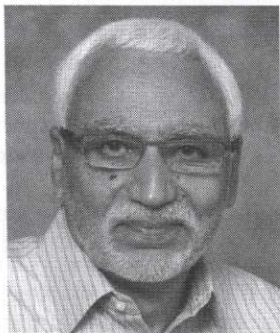
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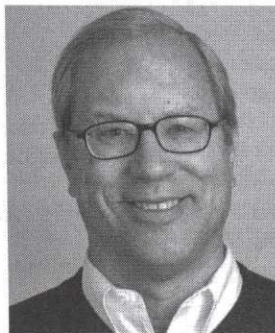
Editorial committee: Helmut Bölcskei, Giuseppe Caire, Meir Feder, Joerg Kliewer, Anand Sarwate, and Andy Singer

## Annual IT Awards Announced

Most of the principal annual awards of the Information Theory Society were announced at the 2011 ISIT in Saint Petersburg. The 2012 Shannon Award goes to Abbas El Gamal. Shlomo Shamai received the 2011 Shannon award, which was officially announced last year. At the 2011 Saint Petersburg ISIT, he gave the much-awaited Shannon Lecture, which fully lived up to the high expectations of our community (check our Society Website soon to watch the lecture if you were unable to attend), and accepted the award with some touching words in Russian and English. The 2011 Wyner Award goes to G. David Forney, Jr. The 2011 IT Paper Award is shared by the papers



Abbas El Gamal



David Forney

The 2011 Chapter of the Year Award was presented to the Spain Chapter.

The Claude E. Shannon Award, awarded for "consistent and profound contributions to the field of information theory," is the highest honor of the IT Society. Abbas El Gamal received the B.Sc. (honors) degree in electrical engineering from Cairo University in 1972 and the M.S. degree in statistics and the Ph.D. degree

in electrical engineering from Stanford University, Stanford, CA, in 1977 and 1978, respectively. From 1978 to 1980, he was an Assistant Professor of Electrical Engineering at the University of Southern California (USC), Los Angeles. He has been on the Stanford University faculty since 1981, where he is currently the Hitachi America Professor in the School of Engineering. His research interest and contributions are in the areas of network information theory, digital imaging, and integrated circuit design. He has authored or coauthored more than 200 papers and 30 patents in these areas. Abbas El Gamal is on the Board of Governors of our Society and is currently our Second Vice President elect. The topics that Abbas El Gamal and his research group span an unusually broad spectrum of theory and design. They range from his sustained and profound contributions to the challenging discipline of multi-terminal information theory, through extensions of his seminal record-setting work in fast-frame image sensors and cameras. He will give the Shannon Lecture at the 2012 ISIT in Cambridge, USA.

"Information Spectrum Approach to Second-Order Coding Rate in Channel Coding", by Masahito Hayashi, *IEEE Transactions On Information Theory*, 55 (11)

and

"Channel Coding Rate in the Finite Blocklength Regime", by Yury Polyanskiy, H. Vincent Poor, Sergio Verdú, *IEEE Transactions On Information Theory*, 56 (5).

The winners of the 2011 Joint Information Theory and Communications Society Paper Award are

"Wireless Information-Theoretic Security", by Matthieu Bloch, João Barros, Miguel R. D. Rodrigues, Steven W. McLaughlin, *IEEE Transactions On Information Theory*, 54 (6)

and

"Multiuser MIMO Achievable Rates With Downlink Training and Channel State Feedback", by Giuseppe Caire, Nihar Jindal, Mari Kobayashi, Niranjay Ravindran, *IEEE Transactions On Information Theory*, 56 (6).

The Aaron D. Wyner Distinguished Service Award recognizes an "individual who has shown outstanding leadership in, and provided long-standing exceptional service to the information theory community". G. David Forney, Jr. received the B.S.E. degree in electrical engineering from Princeton University, Princeton, NJ, in 1961, and the M.S. and Sc.D. degrees in electrical engineering from the Massachusetts Institute of Technology, Cambridge, MA, in 1963 and 1965, respectively. From 1965–99 he was with the Codex Corporation, which was acquired by Motorola, Inc. in 1977. Since 1996, he has been an Adjunct Professor at M.I.T. G. David

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