

**2013 IEEE Information Theory Society
Board of Governors Election
Three-Year Term Ending December 31, 2016**

Andrew R. Barron was born in Trenton, NJ, on September 28, 1959. He received the B.S. degree in electrical engineering and mathematical sciences from Rice University, Houston, TX, in 1981, and the M.S. and Ph.D. degrees in electrical engineering from Stanford University, Stanford, CA, in 1982 and 1985, respectively. From 1977 to 1982 he was a consultant and summer employee of Adaptronics, Inc., McLean, VA. From 1985 until 1992, he was a faculty member of the University of Illinois at Urbana-Champaign in the Department of Statistics and the Department of Electrical and Computer Engineering. He was a Visiting Research Scholar at the Berkeley Mathematical Sciences Research Institute in the Fall of 1991 and Barron Associates, Inc., Standardsville, VA, in the Spring of 1992. In 1992 he joined Yale University, New Haven, CT, as a Professor of Statistics, where he has served as Chair of Statistics from 1999-2006.

Dr. Barron's research interests include the study of information theory properties in the topics of probability limit theory, statistical inference, high-dimensional function estimation, neural networks, model selection, communication, universal data compression, prediction, and investment theory. Dr. Barron received (jointly with Bertrand S. Clarke) the 1991 Browder J. Thompson Prize (best paper in all IEEE Transactions in 1990 by authors age 30 or under) for the paper "Information-Theoretic Asymptotics of Bayes Methods." Dr. Barron was an Institute of Mathematical Statistics Medallion Award recipient in 2005. Dr. Barron is an IEEE Fellow, for contributions to information theory and statistics.

Dr. Barron served on the Board of Governors of the IEEE Information Theory Society from 1995 to 1999, and was Secretary of the Board of Governors during 1989-1990. He has served as an Associate Editor for the *IEEE Transactions on Information Theory* from 1993 to 1995, and the *Annals of Statistics* for 1995-1997.

Sae-Young Chung received the B.S. (summa cum laude) and M.S. degrees in electrical engineering from Seoul National University, Seoul, South Korea, in 1990 and 1992, respectively and the Ph.D. degree in electrical engineering and computer science from the Massachusetts Institute of Technology, Cambridge, MA, USA, in 2000.

From September 2000 to December 2004, Dr. Chung was with Airvana, Inc., Chelmsford, MA, USA. Since January 2005, he has been with the Department of Electrical Engineering, KAIST, Daejeon, South Korea, where he is currently a KAIST Chair Professor. He is also Associate Head of the department.

Dr. Chung was on the Editorial Board of the *IEEE Transactions on Communications* from 2009 to 2012. He is the Technical Program Co-Chair of the 2014 IEEE International Symposium on Information Theory, as well as the Technical Program Co-Chair of the 2015 IEEE Information Theory

Workshop. His research interests include network information theory, coding theory, and wireless communications.

Albert Guillén i Fàbregas was born in Barcelona in 1974. In 1999 he received the Telecommunication Engineering Degree and the Electronics Engineering Degree from Universitat Politècnica de Catalunya and Politecnico di Torino, respectively, and the Ph.D. in Communication Systems from Ecole Polytechnique Fédérale de Lausanne (EPFL) in 2004.

Since 2011 he has been a Research Professor of the Institució Catalana de Recerca i Estudis Avanats (ICREA) at the Department of Information and Communication Technologies, Universitat Pompeu Fabra. He is also an Adjunct Researcher at the Department of Engineering, University of Cambridge, where he was a Reader and a Fellow of Trinity Hall. He has held appointments at the New Jersey Institute of Technology, Telecom Italia, European Space Agency (ESA), Institut Eurécom, University of South Australia, as well as visiting appointments at Ecole Nationale des Télécommunications (Paris), Universitat Pompeu Fabra, University of South Australia, Centrum Wiskunde & Informatica, and Texas A&M University in Qatar. His research interests are in information theory, coding theory and communication theory.

Dr. Guillén i Fàbregas received the Starting Grant from the European Research Council, the Young Authors Award of the 2004 European Signal Processing Conference, the 2004 Best Doctoral Thesis Award from the Spanish Institution of Telecommunications Engineers, and a Research Fellowship of the Spanish Government to join ESA. He is an Associate Editor of the *IEEE Transactions on Information Theory* and of the *Foundations and Trends in Communications and Information Theory*. He is also a Senior Member of IEEE, a member of the Young Academy of Europe, and a past Editor of the *IEEE Transactions on Wireless Communications* (2007-2011).

Tracey Ho is an Assistant Professor in Electrical Engineering and Computer Science at the California Institute of Technology. She received a Ph.D. (2004) and B.S. and M.Eng degrees (1999) in Electrical Engineering and Computer Science (EECS) from the Massachusetts Institute of Technology (MIT).

Dr. Ho was a co-recipient of the 2009 Communications and Information Theory Society Joint Paper Award. She has served as Editor of the *IEEE Information Theory Society Newsletter* from 2009 to 2011, editorial board member of the IT Newsletter since 2012, Associate Editor of the *IEEE Communications Letters* 2005-2011, and Associate Editor of the *IEEE Transactions on Communications* since 2012. Her primary research interests are in information theory, network coding and communication networks.

Amir K. Khandani is a Professor of Electrical and Computer Engineering, University of Waterloo, and holds an NSERC Industrial Research Chair on Network Information Theory, and a Tier I Canada Research Chair on Wireless Systems. He received his M.A.Sc. degree from University of Tehran in 1985, and his Ph.D. degree from McGill University in 1992.

From 1985 to 1988, Dr. Khandani worked as a design engineer at Iran Communication Industries Ltd. on circuit design for telecommunication systems. From 1992 to 1993, he was a Research Associate at INRS Telecommunications (Quebec University) in Montreal. He joined the University of Waterloo in 1993.

Dr. Khandani has served as an Associate Editor for the *IEEE Transactions on Communications* in the area of Coding and Communication Theory, and as the chair of the Information Theory Chapter of the regional IEEE (awarded the best Chapter of the year in 2009).

J. Nicholas Laneman is Founding Director of the Wireless Institute in the College of Engineering, an Associate Professor of Electrical Engineering, and a Fellow of the John J. Reilly Center for Science, Technology, and Values at the University of Notre Dame. He joined the Notre Dame faculty in August 2002 after earning a Ph.D. in Electrical Engineering and Computer Science from the Massachusetts Institute of Technology (MIT).

Dr. Laneman's research and teaching interests are in communications architecture— a blend of information theory, error-control coding, signal processing for communications, network protocols, and hardware design— with current emphasis on wireless systems. He has collaborated with other engineers, economists, and policy makers to help shape spectrum regulation and innovation policy.

Dr. Laneman received a 2006 Presidential Early-Career Award for Scientists and Engineers (PECASE), a 2006 National Science Foundation (NSF) CAREER Award, a 2003 Oak Ridge Associated Universities (ORAU) Ralph E. Powe Junior Faculty Enhancement Award, and the 2001 MIT EECS Harold L. Hazen Graduate Teaching Award. He is an IEEE Senior Member, and has served as an Associate Editor for the *IEEE Transactions on Communications*, as a Guest Editor for Special Issues of the *IEEE Transactions on Information Theory* and *IEEE Journal on Selected Areas in Communications*, and as the first Online Editor for the IEEE Information Theory Society. He is author or co-author of over 100 publications, and has been recognized by Thomson Reuters as an ISI Highly Cited Researcher (2010). He is co-inventor of five issued U.S. patents.

Ralf R. Müller was born in Schwabach, Germany, 1970. He received the Dipl.- Ing. and Dr.-Ing. degree with distinction from Friedrich-Alexander-University (FAU) Erlangen-Nuremberg in 1996 and 1999, respectively.

From 2000 to 2004, Dr. Müller directed a research group at Vienna Telecommunications Research Center in Vienna, Austria, and taught as an adjunct professor at Vienna University of Technology. In 2005, he was appointed full professor at the Department of Electronics and Telecommunications at the Norwegian University of Science and Technology in Trondheim, Norway. In 2013, he joined the Institute for Digital Communications at FAU Erlangen-Nuremberg in Erlangen, Germany. He has held visiting appointments at Princeton University, US, Institute Eurecom, France, University of Melbourne, Australia, University of Oulu, Finland, National University of Singapore, Babes-Bolyai University, Cluj-Napoca, Romania, Kyoto University, Japan, FAU Erlangen-Nuremberg, Germany, and TU Munich, Germany.

Dr. Müller received the Leonard G. Abraham Prize (jointly with Sergio Verdú) for the paper “Design and analysis of low-complexity interference mitigation on vector channels” from the IEEE Communications Society. He was presented awards for his dissertation “Power and bandwidth efficiency of multiuser systems with random spreading” by the Vodafone Foundation for Mobile Communications and the German Information Technology Society (ITG). He received the ITG award for the paper “A random matrix model for communication via antenna arrays,” as well as the Philipp-Reis Award (jointly with Robert Fischer). Dr. Müller served as an Associate Editor for the *IEEE Transactions on Information Theory* from 2003 to 2006.

Joachim Rosenthal received the Diploma in Mathematics from the University of Basel in 1986, and the Ph.D. in Mathematics from Arizona State University in 1990. Since 2004 he has been Professor of Applied Mathematics at the University of Zurich, where he currently also serves as Director of the Mathematics Institute.

From 1990 until 2006 Dr. Rosenthal was with the University of Notre Dame, where he held an endowed chair in Applied Mathematics, and was also Concurrent Professor of Electrical Engineering. In 1994-1995 he spent a sabbatical year at CWI the Center for Mathematics and Computer Science in Amsterdam, The Netherlands. During 1999-2000 he was a Guest Professor at the Swiss Federal Institute of Technology in Lausanne, Switzerland, affiliated with the School of Computer & Communication Sciences.

Dr. Rosenthal’s current research interests are in coding theory and cryptography. He currently serves as Associate Editor for *Journal of Algebra and its Applications* (JAA) and *Advances in Mathematics of Communications* (AMC). In the past he served also on the editorial boards of *SIAM Journal on Control and Optimization* (SICON), *Mathematics of Control, Signals, and Systems* (MCSS), *Linear Algebra and its Applications* (LAA) and *Journal of Mathematical Systems, Estimation, and Control*. In 2002 he served as the symposium chair of the International Symposium on Mathematical Theory of Networks and Systems (MTNS). In 2010 he served together with M. Greferath as conference chair of the IEEE Information Theory Workshop in Dublin, and in 2012, with E. Gorla and A. Shokrollahi, he organized a conference on Trends in Coding Theory in Ascona, Switzerland.

Mikael Skoglund received the Ph.D. degree in 1997 from Chalmers University of Technology, Sweden. In 1997, he joined the Royal Institute of Technology (KTH), Stockholm, Sweden, where he was appointed to the Chair in Communication Theory in 2003. At KTH, he heads the Communication Theory Division and he is the Assistant Dean for Electrical Engineering. He is also a founding faculty member of the ACCESS Linnaeus Center and director for the Center Graduate School.

Dr. Skoglund has worked on problems in source-channel coding, coding and transmission for wireless communications, network information theory and statistical signal processing. He has authored and co-authored more than 100 journal and 250 conference papers, and he holds six patents.

Dr. Skoglund has served on numerous technical program committees for IEEE sponsored conferences (including ISIT and ITW). During 2003-08 he was an Associate Editor of the *IEEE Transactions*

on *Communications*, and during 2008-12 he was an Associate Editor of the *IEEE Transactions on Information Theory*.

Stephan ten Brink has been a faculty member at the University of Stuttgart, Germany, since July 2013, where he is head of the Institute of Telecommunications.

From 1995 to 1997 and 2000 to 2003, Dr. ten Brink was with Bell Laboratories in Holmdel, New Jersey, conducting research on multiple antenna systems. From July 2003 to March 2010, he was with Realtek Semiconductor Corp., Irvine, California, as Director of the wireless ASIC department, developing WLAN and UWB single chip MAC/PHY CMOS solutions. In April 2010 he returned to Bell Laboratories as Department Head of the Wireless Physical Layer Research Department in Stuttgart, Germany.

Dr. ten Brink is a recipient and co-recipient of several awards, including the IEEE Stephen O. Rice Paper Prize for contributions to channel coding and signal detection for multiple-antenna systems. He is best known for his work on iterative decoding (EXIT charts) and MIMO communications.

Alexander Vardy was born in Moscow, U.S.S.R., in 1963. He earned his B.Sc. (summa cum laude) from the Technion, Israel, in 1985, and Ph.D. from the Tel-Aviv University, Israel, in 1991. During the years 1992 and 1993 he was a Visiting Scientist at the IBM Almaden Research Center, in San Jose, CA. From 1993 to 1998, he was with the University of Illinois at Urbana-Champaign, as an Assistant and then Associate Professor. Since 1998, he has been with the University of California San Diego (UCSD), where he is the Jack Keil Wolf Endowed Chair Professor in the Department of Electrical and Computer Engineering, with joint appointments in the Department of Computer Science and the Department of Mathematics. He has held long-term visiting appointments with CNRS, France, the EPFL, Switzerland, and the Technion, Israel.

Dr. Vardy's research interests include error-correcting codes, algebraic and iterative decoding algorithms, lattices and sphere packings, coding for digital media, cryptography and computational complexity theory, and fun math problems.

He received an IBM Invention Achievement Award in 1993, and NSF Research Initiation and CAREER awards in 1994 and 1995. In 1996, he was appointed Fellow in the Center for Advanced Study at the University of Illinois, and received the Xerox Award for faculty research. In the same year, he became a Fellow of the Packard Foundation. He was elected Fellow of the IEEE in 1999. He received the IEEE Information Theory Society Paper Award (jointly with Ralf Koetter) for the year 2004. In 2005, he received the Fulbright Senior Scholar Fellowship, and the Best Paper Award at the IEEE Symposium on Foundations of Computer Science (FOCS). During 1995-1998, he was an Associate Editor for Coding Theory and during 1998-2001, he was the Editor in-Chief of the *IEEE Transactions on Information Theory*. From 2003 to 2009, he was an Editor for the *SIAM Journal on Discrete Mathematics*. He was a member of the Board of Governors of the IEEE Information Theory Society during 1998-2006, and again since 2011.

Emanuele Viterbo received his degree (Laurea) in Electrical Engineering in 1989 and his Ph.D. in 1995 in Electrical Engineering from the Politecnico di Torino, Torino, Italy. He held post-doctoral research positions in the Dipartimento di Elettronica of the Politecnico di Torino and at the Information Sciences Research Center of AT&T Research, Florham Park, NJ. From 1998-2006, he served as Assistant Professor and Associate Professor at the Dipartimento di Elettronica at Politecnico di Torino. In 2006 he became a Full Professor in DEIS at the University of Calabria, Italy. Since September 2010, he has been a Professor in the ECSE Department and Associate Dean for Research Training of the Faculty of Engineering at Monash University, Melbourne, Australia.

In 1993 Dr. Viterbo was a visiting researcher in the Communications Department of DLR, Oberpfaffenhofen, Germany. In 1994 and 1995 he visited the École Nationale Supérieure des Télécommunications (ENST), Paris. He has held visiting research appointments at the Math Department of EPFL, Lausanne, Switzerland, the Telecommunications Department of UNICAMP, Campinas, Brazil, the ITR of UniSA, Adelaide, Australia, and the Nokia Research Center, Helsinki, Finland.

Dr. Viterbo is a 2011 Fellow of the IEEE, and a Member of the Board of Governors of the IEEE Information Theory Society (2011-2013). He has been Associate Editor of *IEEE Transactions on Information Theory*, *European Transactions on Telecommunications* and Guest Editor for a special issue of the *IEEE Journal of Selected Topics in Signal Processing*. He is currently Associate Editor of the *Journal of Communications and Networks*, and Editor of *Foundations and Trends in Communications and Information Theory*. He is an ISI Highly Cited Researcher. His main research interests are in lattice codes for the Gaussian and fading channels, algebraic coding theory, algebraic space-time coding, network coding, digital terrestrial television broadcasting, and digital magnetic recording.