Emmanuel Abbe

Biography: Emmanuel Abbe received his Ph.D. degree from the Department of Electrical Engineering and Computer Science at the Massachusetts Institute of Technology in 2008, and his M.S. degree from the Department of Mathematics at the Ecole Polytechnique Fédérale de Lausanne in 2003. He joined Princeton University as an assistant professor in 2012 and became associate professor in 2016, jointly in the Program for Applied and Computational Mathematics and the Department of Electrical Engineering. He is also an Associate Faculty in the Department of Mathematics at Princeton University since 2016. He is the recipient of the Foundation Latsis International Prize, the Bell Labs Prize, the NSF CAREER Award, the Google Faculty Research Award and the Walter Curtis Johnson Prize. His research interests are in information theory and machine learning.

Selected Publications:


Jean-Francois Chamberland

**Biography:** Jean-Francois Chamberland completed a Bachelor of Engineering degree at McGill University in 1998, and a Master of Science degree at Cornell University in 2000. He received a Doctor of Philosophy degree from the University of Illinois at Urbana-Champaign in Electrical Engineering in 2004. He is an Associate Professor in the Department of Electrical and Computer Engineering at Texas A&M University. His research interests are in the areas of communication and information theory, decision and control, computer systems and networks, statistical inference, learning, and biological systems. His contributions to distributed detection have been recognized through an IEEE Young Author Best Paper Award from the IEEE Signal Processing Society. He was the recipient of a Faculty Early Career Development (CAREER) Award from the National Science Foundation.

**Web site:** [http://www.ece.tamu.edu/~chmbrlnd/](http://www.ece.tamu.edu/~chmbrlnd/)

**Selected Publications:**


Parikshit Gopalan

Biography  Parikshit Gopalan earned a Bachelor of Technology in Computer Science and Engineering from IIT Bombay in 2000, and a Ph.D in Algorithms, Combinatorics and Optimization from the Georgia Institute of Technology in 2006, followed by postdoctoral positions at the University of Texas at Austin and the University of Washington. He joined Microsoft in 2008 as a Researcher in the MSR Silicon Valley Lab. From 2015 onwards, he was a Senior Researcher in the MSR Redmond Lab. In 2016 he joined VMware Research as a Senior Staff Researcher. His research interests are in theoretical computer science and coding theory, focusing on algorithms, computational complexity, machine learning and coding for distributed storage. His work has won awards including the 2014 IEEE Communication Society & Information Theory Society Joint Paper Prize.

Representative Publications


Philipp Grohs

**Biography:** Philipp Grohs received a Master's degree in Mathematics from the Technical University of Vienna in 2006 and a doctoral degree in Applied Mathematics from the Technical University of Vienna in 2007. He is an Associate Professor of Mathematics at the University of Vienna. His research interests are in Signal Processing, Numerical Analysis, Computational Harmonic Analysis, Machine Learning and Computational Geometry. He is the recipient of the 2014 ETH Latsis Prize.

**Web site:** [http://mat.univie.ac.at/~grohs](http://mat.univie.ac.at/~grohs)

**Selected Publications:**

Ioannis Kontoyiannis

Biography: Ioannis Kontoyiannis was born in Greece in 1972. He received the B.Sc. degree in mathematics in 1992 from Imperial College (University of London), and in 1993 he obtained a distinction in Part III of the Cambridge University Pure Mathematics Tripos. In 1997 he received the M.S. degree in statistics, and in 1998 the Ph.D. degree in electrical engineering, both from Stanford University. During 1998-2001 he was with the Department of Statistics at Purdue University, and during 2000-2005 he was with the Division of Applied Mathematics and with the Department of Computer Science at Brown University. Since March 2005 he has been with the Department of Informatics of the Athens University of Economics and Business, where he currently a Professor. In 2002 he was awarded the Manning endowed assistant professorship; in 2004 he was awarded the prestigious Sloan Foundation Research Fellowship; in 2005 he was awarded an honorary Master of Arts Degree Ad Eundem by Brown University; in 2009 he was awarded a Marie Curie Fellowship. He has served two terms as an Associate Editor for the IEEE Transactions on Information Theory (in Shannon Theory, and At Large). He is an IEEE Fellow.

Web page: http://pages.cs.aueb.gr/users/yiannisk/

Selected publications


Gitta Kutyniok

Biography: Gitta Kutyniok completed her Diploma in Mathematics and Computer Science in 1996 at the Universität Paderborn in Germany. She received her Ph.D. degree in the area of time-frequency analysis from the same university in 2000. She completed her Habilitation in Mathematics in 2006 and received her venia legendi. From 2001 to 2008 she held visiting appointments at several US institutions, including Princeton University, Stanford University, Yale University, Georgia Institute of Technology, and Washington University in St. Louis. After returning to Germany in October 2008, she became a full professor of mathematics at the Universität Osnabrück, and headed the Applied Analysis Group. Since October 2011, she has an Einstein Chair at the Technische Universität Berlin and is head of the Applied Functional Analysis Group (AFG). In the Fall Term 2014, she had a visiting professorship at the ETH Zürich.

Her research and teaching have been recognized by various awards, including a Heisenberg Fellowship and the von Kaven Prize by the German Research Foundation, awards by the Universität Paderborn and the Justus-Liebig Universität Gießen for Excellence in Research, as well as the Weierstrass Prize for Outstanding Teaching. She also delivered the Noether-Lecture at the 2013 Annual Meeting of the Mathematical Societies from Germany and Austria and the Hans Schneider ILAS Lecturer at IWOTA 2016 in St. Louis. Last year, she was honored with a membership in the Berlin-Brandenburg Academy of Sciences and Humanities (BBAW).

Gitta Kutyniok is the founding Scientific Director of the “Berlin International Graduate School in Model- and Simulation based Research” (BIMoS), the chair of the GAMM activity group on “Mathematical Signal- and Image Processing”, and the main coordinator of the priority program on “Compressed Sensing in Information Theory” of the German Research Foundation. In addition, she is a board member of the Berlin Mathematical School, a board member of the Einstein Center for Mathematics Berlin (ECMath), and a member of the council of the MATHEON “Mathematics for key technologies” in Berlin. She is also an Associate Editor as well as Corresponding Editor for several journals in the area of applied mathematics as well as of the IEEE signal processing letters.

Webpage: www.math.tu-berlin.de/~kutyniok

Selected Publications (Please note that in mathematics, the authors are always ordered alphabetically!):

Michael Lentmaier

Biography: Michael Lentmaier received the Dipl.-Ing. degree in Electrical Engineering from University of Ulm, Germany in 1998, and the Ph.D. degree in Telecommunication Theory from Lund University, Sweden in 2003. From 2005 to 2007 he was with the Institute of Communications and Navigation of the German Aerospace Center (DLR) in Oberpfaffenhofen, where he worked on signal processing techniques in satellite navigation receivers. From 2008 to 2012 he was a senior researcher and lecturer at the Vodafone Chair Mobile Communications Systems at TU Dresden, where he was heading the Algorithms and Coding research group. Since January 2013 he is an Associate Professor at the Department of Electrical and Information Technology at Lund University. His research interests include design and analysis of coding systems, graph based iterative algorithms and Bayesian methods applied to decoding, detection and estimation in communication systems. He is a senior member of the IEEE and served as an editor for IEEE Communications Letters from 2010 to 2013 and IEEE Transactions on Communications since 2014. He was awarded the Communications Society & Information Theory Society Joint Paper Award (2012) for his paper "Iterative Decoding Threshold Analysis for LDPC Convolutional Codes".

Selected Publications

Biography and Selected Publications

Biography

Neri Merhav (S’86–M’87–SM’93–F’99) was born in Haifa, Israel, on March 16, 1957. He received the B.Sc., M.Sc., and D.Sc. degrees from the Technion, Israel Institute of Technology, in 1982, 1985, and 1988, respectively, all in electrical engineering.

From 1988 to 1990 he was with AT&T Bell Laboratories, Murray Hill, NJ, USA. Since 1990 he has been with the Electrical Engineering Department of the Technion, where he is now the Irving Shepard Professor. During 1994–2000 he was also serving as a consultant to the Hewlett-Packard Laboratories – Israel (HPL-I). His research interests include information theory, statistical communications, and statistical signal processing. He is especially interested in the areas of lossless/lossy source coding and prediction/filtering, relationships between information theory and statistics, detection, estimation, as well as in the area of Shannon Theory, including topics in joint source–channel coding, source/channel simulation, and coding with side information with applications to information hiding and watermarking systems. Another recent research interest concerns the relationships between Information Theory and statistical physics.

Dr. Merhav was a co-recipient of the 1993 Paper Award of the IEEE Information Theory Society and he is a Fellow of the IEEE since 1999. He also received the 1994 American Technion Society Award for Academic Excellence and the 2002 Technion Henry Taub Prize for Excellence in Research. From 1996 until 1999 he served as an Associate Editor for Source Coding to the IEEE TRANSACTIONS ON INFORMATION THEORY. He also served as a co–chairman of the Program Committee of the 2001 IEEE International Symposium on Information Theory. He is currently on the Editorial Board of FOUNDATIONS AND TRENDS IN COMMUNICATIONS AND INFORMATION THEORY.

Selected Publications


Website

http://webee.technion.ac.il/people/merhav/
Klaus-Robert Müller

Bio: Klaus-Robert Müller studied physics until 1989 and received the Ph.D. degree in computer science in 1992 at University of Karlsruhe. He was a research fellow at the University of Tokyo in 1994/95. In 1995, he founded the Intelligent Data Analysis group at GMD-FIRST and directed it until 2008. From 1999 to 2006, he was a Professor at the University of Potsdam. Afterwards he became a Professor of computer science at TU Berlin and at the same time director of the Bernstein Focus on Neurotechnology Berlin until 2014. From 2014 he has served as co-director of the Big Data Center in Berlin. Since 2012, he also holds a distinguished professorship at Korea University, Seoul. Dr. Müller was awarded amongst others the SEL Alcatel Communication Award in 2006 and in 2014 the Berlin Science Award granted by Berlin’s governing Mayor. In 2012, he was elected to be a member of the German National Academy of Sciences-Leopoldina. His current research interests include machine learning and data analysis with applications in the sciences (e.g. Neuroscience, Physics, Chemistry and Medicine) as well as in industry.

Website: https://www.ml.tu-berlin.de/menue/members/klaus-robert_mueller/

Selected Publications

Rei Safavi-Naini

Biography: Security, Privacy and Information Assurance, and Professor of Computer Science at the University of Calgary. Before joining the University in 2007, she was the Director of Telecommunication and Information Technology Research Institute (now ICT Research Institute) at the University of Wollongong, Australia. She has authored or co-authored over 350 articles in refereed journals and conferences, and served as an Associate Editor of IEEE Transaction on Information Theory and ACM Transaction on Information and System Security (TISSEC). She is currently an Associate Editor of IEEE Transaction on Secure and Dependable Computing, IET Information Security and Journal of Mathematical Cryptology. She has been Program Chair/co-Chair of a number of conferences and workshops including, ACM CCSW 2014, Financial Cryptography 2014, ACNS 2013 and Crypto 2012 and is the founding member of the Steering Committee of International Conference in Information Theoretic Security (ICITS). She has a BEng, and MEng from University of Tehran, and PhD from University of Waterloo. Her current research interest includes cryptography, communication and network security, cloud security, and privacy enhancing technologies.

Web site: http://pages.cpsc.ucalgary.ca/~rei/

Selected Publications:
Vladimir Sidorenko

Biography: Vladimir Sidorenko was born in Krasnoyarsk, Russia. He received the M.S. degree in electrical engineering in 1972 and the Ph.D. degree in mathematics in 1975 both from the Moscow Institute for Physics and Technology. From 1975 to 1983 he was with Computer center of 4th Department of Russian Health Ministry, first as a senior engineer and then as the vise director of the Computer center. In 1983 he joined the Institute for Information Transmission Problems (IITP), Russian Academy of Sciences, Moscow, as a senior research fellow. From 2003 till 2014 he was a senior researcher at Institute of Communications Engineering, Ulm University, where he received In centi award for the best lecturing. From January 2015 he is a senior researcher at Institute for Communications Engineering of Technical University of Muenchen, Germany, on leave from IITP. As invited researcher he worked at University of Lund, Sweden, Technical University of Darmststdt, Germany, University of Lancaster, UK, and University of Aveiro, Portugal. His research interests include coding theory, telecommunications, signal processing, cryptology, and applications. He has published more than 120 research papers in these fields. He is a member of IEEE.

Web site: https://www.lnt.ei.tum.de/en/people/senior-researchers/sidorenko/

Selected Publications

References


Vinay A. Vaishampayan  
http://vinayvaishampayan.net

**Biography:** Vinay A. Vaishampayan obtained a bachelor’s degree in electrical engineering at the Indian Institute of Technology, Delhi in 1981, and MS and PhD degrees in electrical engineering from the University of Maryland, College Park, in 1986 and 1989, respectively. His research interests are in the areas of communications, signal processing and information theory. He served on the electrical engineering faculty at Texas A&M University, College Station, and was a research staff member at AT&T Shannon Laboratory, Florham Park, NJ, where he served as Department Head, Communication Sciences Research, and as Distinguished Member of Technical Staff. He is currently a Professor in the Engineering Science and Physics Department at the City University of New York. He served on the editorial board of the IEEE Transactions of Information Theory, as Associate Editor At Large, from 2004-2007. He is a Fellow of the IEEE.

**Selected Publications:**


