

Bikash Kumar Dey

Biography: Bikash Kumar Dey received the Bachelor of Engineering degree in Electronics and Tele-Communication Engineering from the Bengal Engineering College, India in 1996. He received the Master of Engineering degree in Signal Processing in 1999, and Ph.D. in Electrical Communication Engineering in 2003, both from the Indian Institute of Science, Bangalore. He is a Professor of Electrical Engineering at the Indian Institute of Technology Bombay. His research interests are in Information Theory, Coding Theory, and Wireless Communication.

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Selected Publications:

1. M. Mishra, B. K. Dey, V. M. Prabhakaran, S. N. Diggavi, "Wiretapped Oblivious Transfer," *IEEE Transactions on Information Theory*, vol. 63, no. 4, pp. 2560–2595, 2017.
2. A. Budkuley, B. K. Dey and V. M. Prabhakaran, "Communication in the Presence of a State-Aware Adversary," *IEEE Transactions on Information Theory*, vol. 63, no. 11, pp. 7396–7419, 2017.
3. J. Ravi, B. K. Dey and E. Viterbo, "Oblivious Transfer Over Wireless Channels," *IEEE Transactions on Communications*, vol. 64, no. 3, pp. 893–905, 2016.
4. S. Sreekumar, B. K. Dey and S. R. B. Pillai, "Distributed Rate Adaptation and Power Control in Fading Multiple Access Channels," *IEEE Transactions on Information Theory*, vol. 61, no. 10, pp. 5504–5524, 2015.
5. B. K. Dey, S. Jaggi and M. Langberg, "Codes against Online Adversaries: Large Alphabets," *IEEE Transactions on Information Theory*, vol. 59, no. 6, pp. 3304–3316, 2013.
6. B. K. Dey, S. Jaggi, M. Langberg and A. D. Sarwate, "Upper Bounds on the Capacity of Binary Channels with Causal Adversaries," *IEEE Transactions on Information Theory*, vol. 59, no. 6, pp. 3753–3763, 2013.
7. V. Shah, B. K. Dey and D. Manjunath, "Network Flows for Function Computation," *IEEE Journal on Selected Areas of Communications - Special Issue on In-Network Computation: Exploring the Fundamental Limits*, vol. 31, no. 4, pp. 714–730, 2013.
8. B. K. Rai and B. K. Dey, "On Network Coding for Sum-networks," *IEEE Transactions on Information Theory*, vol. 58, no. 1, pp. 50–63, 2012.
9. B. K. Dey, "On existence of good self-dual quasi-cyclic codes," *IEEE Transactions on Information Theory*, vol. 50, no. 8, pp. 1794–1798, 2004.
10. B. K. Dey and B. S. Rajan, "Affine Invariant Extended Cyclic Codes over Galois Rings," *IEEE Transactions on Information Theory*, vol. 50, no. 4, pp. 691–698, 2004.

Maxim Raginsky

Biography. Maxim Raginsky received the B.S. and the M.S. degrees in Electrical Engineering in 2000, and the Ph.D. degree in Electrical Engineering in 2002, all from Northwestern University, Evanston, IL. He is an Associate Professor and William L. Everitt Fellow in the Department of Electrical and Computer Engineering, University of Illinois at Urbana-Champaign, with a joint appointment at the Coordinated Science Laboratory and the Department of Computer Science. His research interests lie at the intersection of information theory, high-dimensional probability, machine learning, and control theory. He is currently an Associate Editor of *IEEE Transactions on Network Science and Engineering* and a member of the Editorial Board of *Foundations and Trends in Communication and Information Theory*. He is a Senior Member of IEEE.

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Selected publications

1. A. Xu and M. Raginsky, “Information-theoretic analysis of generalization capability of learning algorithms,” *Advances in Neural Information Processing Systems (NIPS)*, 2017
2. A. Xu and M. Raginsky, “Information-theoretic lower bounds for distributed function computation,” *IEEE Transactions on Information Theory*, vol. 63, no. 4, pp. 2314–2337, 2017
3. A. Xu and M. Raginsky, “Information-theoretic lower bounds on Bayes risk in decentralized estimation,” *IEEE Transactions on Information Theory*, vol. 63, no. 3, pp. 1580–1600, 2017
4. A. Kontorovich and M. Raginsky, “Concentration of measure without independence: a unified approach via the martingale method,” in *Convexity and Concentration* (ed. by E. Carlen, M. Madiman, and E.M. Werner), Springer, 2017
5. M. Raginsky, “Strong data processing inequalities and Φ -Sobolev inequalities for discrete channels,” *IEEE Transactions on Information Theory*, vol. 62, no. 6, pp. 3355–3389, 2016
6. M. Raginsky and I. Sason, *Concentration of Measure Inequalities in Information Theory, Communications and Coding, Foundations and Trends in Communications and Information Theory*, vol. 10, issues 1 and 2, pp. 1–246, 2013; 2nd ed., 2014
7. M. Raginsky, “Empirical processes, typical sequences and coordinated actions in standard Borel spaces,” *IEEE Transactions on Information Theory*, vol. 59, no. 3, pp. 1288–1301, 2013
8. M. Raginsky and A. Rakhlin, “Information-based complexity, feedback and dynamics in convex programming,” *IEEE Transactions on Information Theory*, vol. 57, no. 10, pp. 7036–7056, 2011
9. M. Raginsky, “Joint universal lossy coding and identification of stationary mixing sources with general alphabets,” *IEEE Transactions on Information Theory*, vol. 55, no. 5, pp. 1945–1960, 2009
10. M. Raginsky, “Joint fixed-rate universal lossy coding and identification of continuous-alphabet memoryless sources,” *IEEE Transactions on Information Theory*, vol. 54, no. 7, pp. 3059–3077, 2008