Alexandros G. Dimakis

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Education

University of California, Berkeley
September 2005-2008: Ph.D in Electrical Engineering and Computer Sciences.
Advisors: Kannan Ramchandran and Martin Wainwright

University of California, Berkeley
September 2003-2005: MSc in Electrical engineering and Computer Sciences.

National Technical University of Athens
September 1998- June 2003: Diploma in Electrical and Computer Engineering (5 year degree)

Professional Experience

- Associate Professor, Dept. of Electrical and Computer Engineering, University of Texas, Austin. Sept 2015 - present.
- Assistant Professor, Dept. of Electrical and Computer Engineering, University of Texas, Austin. Jan 2013-Aug 2015
- Assistant Professor, Colleen and Roberto Padovani Early Career Chair in Electrical Engineering, University of Southern California. May 2009-Dec 2012.
- California Institute of Technology, Center for the Mathematics of Information (CMI) Postdoctoral Scholar. Sept 2008-May 2009.
- Microsoft Research Communication and Collaboration systems group, Project: Coding for storage in data centers.
- Ecole Polytechnique Federale de Lausanne (EPFL) Audiovisual Communications Laboratory - LCAV School of Computer and Communication Sciences (Summer 2005).
  Project: Gossip Algorithms for Distributed Signal Processing.

Awards and Recognition

- Communication Theory Workshop (CTW) Invited Plenary Speaker, May 2015
- IEEE Distinguished lecturer (Information Theory society), 2015
- Army Research Office (ARO) Young Investigator Award, June 2014
- Keynote speaker, Workshop on Big Dynamic Distributed Data (in conjunction with VLDB 2013)
- Joint Information Theory and Communications Society Best Paper Award, 2012
- Google Faculty Research Award, 2012.
- IEEE ComSoc Data Storage Committee Best Paper Award, 2010
- NSF Career Award, 2011
- Keynote speaker, 2010 IEEE Int. Symposium on Network Coding.
- 2008 Eli Jury Dissertation Award.
- Microsoft Research Fellowship for 2007-2008
- Best Paper award in IEEE/ACM Symposium on Information Processing in Sensor Networks (IPSN '05)

Selected Invited presentations

- University of Minnesota, 2015 ECE department colloquium speaker
- Invited Tutorial speaker, IEEE Int. Symposium on Information Theory (ISIT) 2013.
- Inited speaker, NSF Workshop: Big Data: From Signal Processing to Systems Engineering: March 2013
- Stanford University, Information Systems Laboratory (ISL) Colloquium invited speaker. Jan 2012.
- MIT LIDS Seminar invited speaker (joint with Theory Of Computation seminar). Dec. 2012
- European School of Information Theory 2012, School lecturer
- Invited Tutorial, Workshop on Network Coding and Data Storage, 2011
- Coordinated Science Laboratory (CSL) Seminar, UIUC, Dec. 2011.

Publications

Peer-Reviewed Journal Articles

1. M. Ji, A. Tulino, J. Llorca, A.G. Dimakis, "Finite Length Analysis of Caching-Aided Coded Multicasting," IEEE Transactions on Information Theory, to appear.
2. I. Tamo, D. Papailiopoulos, A.G. Dimakis, "Optimal Locally Repairable Codes and Connections to Matroid Theory," IEEE Transactions on Information Theory, to appear.
3. A. Le, A.G. Dimakis, and A. Markopoulou, "Auditing for Distributed Storage Systems," to appear in IEEE/ACM Transactions on Networking, 2016.
4. A.S. Rawat, D.S. Papailiopoulos, A.G. Dimakis and S. Vishwanath, "Locality and Availability in Distributed Storage." IEEE Trans. Information Theory 62(8): 4481-4493, 2016.
5. A.S. Rawat, Z. Song, A.G. Dimakis and A. Gal, "Batch Codes Through Dense Graphs Without Short Cycles," IEEE Trans. Information Theory 62(4): 1592-1604 (2016)
6. I. Mitliagkas, M. Borokhovich, A.G. Dimakis, C. Caramanis, FrogWild! Fast PageRank Approximations on Graph Engines. Proceedings of the VLDB Endowment 2015, accepted for publication. (Preliminary version appeared in NIPS Workshop.)
7. N. Lee, A.G. Dimakis, and R.W. Heath Jr., "Index Coding with Coded Side-Information," IEEE Communications Letters, vol. 19, no. 3, pp. 319-322, March 2015.
8. D. Papailiopoulos and A.G. Dimakis, "Locally Repairable Codes," IEEE Transactions on Information Theory, IEEE Transactions on Information Theory, vol. 60 (10), pp. 5843-5855, Oct. 2014.
9. M. Sathiamoorthy, A.G. Dimakis, B. Krishnamachari and F. Bai, "Distributed Storage Codes Reduce Latency in Vehicular Networks, IEEE Transactions on Mobile Computing, Vol.: 13, Issue: 9, pp. 2016-2027, September 2014.

10. N. Golrezaei, P. Mansourifard, A.F. Molisch and A.G. Dimakis, "Base-Station Assisted Device-to-Device Communications for High-Throughput Wireless Video Networks, IEEE Transactions on Wireless Communications, Vol.13, Issue: 7, pp. 3665-3676, July 2014.
11. B. Hassibi, M. Hansen, A.G. Dimakis, H.A.J. Alshamary, W. Xu, "Optimized Markov Chain Monte Carlo for Signal Detection in MIMO Systems: An Analysis of the Stationary Distribution and Mixing Time, IEEE Transactions on Signal Processing, Volume: 62 , Issue: 17, July 2014.
12. N. Golrezaei, A.G. Dimakis, A.F. Molisch, "Scaling Behavior for Device-to-Device Communications With Distributed Caching, IEEE Transactions on Information Theory Vol.60, Issue: 7, pp. 4286-4298, June 2014
13. K. Shanmugam, D.S. Papailiopoulos, A.G. Dimakis, and G. Caire, "A Repair Framework for Scalar MDS Codes," IEEE Journal on Selected Areas in Communications, vol. 32(5), pp. 998-1007, May 2014.
14. A. Megasthenis and A.G. Dimakis, "Repairable Fountain Codes," IEEE Journal on Selected Areas in Communications, vol. 32(5), pp. 1037-1047, May 2014.
15. T.K. Dikaliotis, A.G. Dimakis, T. Ho, and M. Effros, "On the Delay Advantage of Coding in Packet Erasure Networks," IEEE Transactions on Information Theory, vol. 60 (5), pp. 2868-2883. May 2014.
16. K. Shanmugam, N. Golrezaei, A. F. Molisch, A.G. Dimakis, and G. Caire, "FemtoCaching: Wireless Video Content Delivery through Distributed Caching Helpers," IEEE Transactions on Information Theory, vol. 59(12), pp. 8402-8413, Dec. 2013.
17. M. Sathiamoorthy, M. Asteris, D. S. Papailiopoulos, A.G. Dimakis, R. Vadali, S. Chen, D. Borthakur, "XORing Elephants: Novel Erasure Codes for Big Data," Proceedings of the VLDB Endowment, Volume 6, No 5, 325-336, March 2013,
18. M. Sathiamoorthy, A.G. Dimakis, B. Krishnamachari and F. Bai, "Distributed Storage Codes Reduce Latency in Vehicular Networks," IEEE Transactions on Mobile Computing, Issue 99, Pg. 1-12 , 2013.
19. D. S. Papailiopoulos, A.G. Dimakis, V. R. Cadambe, "Repair Optimal Erasure Codes through Hadamard Designs," IEEE Transactions on Information Theory, Vol 59 (5), 3021-3037, 2013.
20. N. Golrezaei, A. F. Molisch, A.G. Dimakis, and G. Caire, "Femtocaching and Device-to-Device Collaboration: A New Architecture for Wireless Video Distribution," IEEE Communications Magazine, vol. 51(4), 142-149, 2013.
21. A. Khajehnejad, A.G. Dimakis, B. Hassibi, B. Vigoda, W. Bradley, "Reweighted LP Decoding for LDPC Codes," IEEE Transactions on Information Theory, Vol. 58 (9): 5972-5984, Sept. 2012.
22. D.S. Papailiopoulos and A.G. Dimakis, "Interference Alignment as a Rank Constrained Rank Minimization," IEEE Transactions on Signal Processing, vol. 60(8), pp. 4278-4288, Aug. 2012.
23. D. Leong, A.G. Dimakis, T. Ho, "Distributed Storage Allocations," IEEE Transactions on Information Theory, vol. 58(7), pp. 4733-4752, July 2012.
24. A.G. Dimakis, R. Smarandache, P. O. Vontobel, "LDPC Codes for Compressed Sensing," IEEE Transactions on Information Theory, vol. 58(5), pp. 3093-3114, May 2012.

25. A.D. Sarwate, A.G. Dimakis, "The Impact of Mobility on Gossip Algorithms," IEEE Transactions on Information Theory, vol. 58(3), pp. 1731-1742, March 2012.
26. A. S. Tehrani, A.G. Dimakis, M. J. Neely, "SigSag: Iterative Detection through Soft Message-Passing",IEEE Journal of Selected Topics in Signal Processing, vol. 5(8), pp. 1512-1523, Dec. 2011.
27. B. Nazer, A.G. Dimakis and M. Gastpar, "Local Interference can Accelerate Gossip Algorithms," IEEE Journal of Selected Topics in Signal Processing, Special Issue on Gossiping Algorithms Design and Application, vol. 5(5), pp. 876-887, August 2011.
28. C. Daskalakis, A.G. Dimakis and E. Mossel, "Connectivity and Equilibrium in Random Games," Annals of Applied Probability, 21(3): 987-1016, June 2011.
29. A.G. Dimakis, K. Ramchandran, Y. Wu, C. Suh, ""A Survey on Network Codes for Distributed Storage," the Proceedings of the IEEE. Vol 99, No 3, 476-489, March 2011.
30. M. A. Khajehnejad, A.G. Dimakis, W. Xu, B. Hassibi, "Sparse Recovery of Nonnegative Signals with Minimal Expansion," IEEE Transactions on Signal Processing, Vol. 59(1), 196-208, January 2011.
31. A.G. Dimakis, S. Kar, J. M.F. Moura, M. G. Rabbat, A. Scaglione, "Gossip Algorithms for Distributed Signal Processing," the Proceedings of the IEEE. Vol. 98, no. 11, pp. 1847-1864, November 2010.
32. F. Benezit, A.G. Dimakis, P. Thiran, and M. Vetterli, "Order-optimal consensus through randomized path averaging," IEEE Transactions on Information Theory, Vol. 56, Issue 10, 5150-5167, Oct. 2010.
33. A.G. Dimakis, P. B. Godfrey, Y. Wu, M. J. Wainwright and K. Ramchandran, "Network Coding for Distributed Storage Systems," IEEE Transactions on Information Theory, Vol. 56(9), 4539-4551 Sept. 2010.
    IEEE ComSoc Data Storage Best paper award, 2010.
    IEEE Information Theory Society and ComSoc 2012 Joint paper award.
34. A.G. Dimakis, A. A. Gohari and M. Wainwright, "Guessing Facets: Polytope Structure and Improved LP Decoding," IEEE Transactions on Information Theory, Volume: 55 Issue 8, 3479-3487 Aug. 2009.
35. C. Daskalakis, A.G. Dimakis, R. Karp and M. J. Wainwright, "Probabilistic Analysis of Linear Programming Decoding," IEEE Transactions on Information Theory 54(8), 3565-3578, August 2008.
36. A.G. Dimakis, A.D. Sarwate, and M.J. Wainwright, "Geographic Gossip: Efficient Averaging for Sensor Networks," IEEE Transactions on Signal Processing, Volume 56, Issue 3, 1205-1216, March 2008.
37. A.G. Dimakis V. Prabhkaran, K. Ramchandran, "Decentralized Erasure Codes for Distributed Networked Storage," Joint special issue, IEEE Transactions on Information Theory and IEEE/ACM Transactions on Networking, 2809-2816, June 2006.

38. A.G. Dimakis, P. Maragos, "Phase Modulated Resonances by Self-Similar Processes With Application to Turbulent Sounds," IEEE Transactions on Signal Processing, Vol 53. 4261-4272, Nov 2005.

Book Chapter

39. A.G. Dimakis and K. Ramchandran, "Network Coding for Distributed Storage in Wireless Networks," in V. Saligrama, editor, *Networked Sensing Information and Control*, Signals and Communication series, Springer Verlag, pp. 115-134 October 2007.

Publications in Peer-Reviewed Conference Proceedings

40. E. Lindgren, S. Wu, A.G. Dimakis, "Leveraging Sparsity for Efficient Submodular Data Summarization," Proc. of Neural Information Processing Systems (NIPS), Dec. 2016.
41. S. Wu, S. Bhojanapalli, S. Sanghavi, A.G. Dimakis, "Single Pass PCA of Matrix Products," Proc. of Neural Information Processing Systems (NIPS), Dec. 2016.
42. E.R. Elenberg, K. Shanmugam, M. Borokhovich, and A.G. Dimakis. Distributed Estimation of Graph 4-profiles, in Proc. International World Wide Web Conference (WWW), 2016.
43. M. Asteris, A. Kyrillidis, D. Papailiopoulos, A.G. Dimakis, "Bipartite Correlation Clustering: Maximizing Agreements," Artificial Intelligence and Statistics (AISTATS), 2016
44. M. Asteris, D. Papailiopoulos, A. Kyrillidis, A.G. Dimakis, "Sparse PCA via Bipartite Matchings," Proc. of Neural Information Processing Systems (NIPS), Dec. 2015.
45. M. Asteris, D. Papailiopoulos, A.G. Dimakis, "Orthogonal NMF through Subspace Exploration," Proc. of Neural Information Processing Systems (NIPS), Dec. 2015.
46. K. Shanmugam, M. Kocaoglu, A.G. Dimakis, S. Vishwanath, "Learning Causal Graphs with Small Interventions," Proc. of Neural Information Processing Systems (NIPS), Dec. 2015.
47. E.R. Elenberg, K. Shanmugam, M. Borokhovich and A.G. Dimakis, "Beyond Triangles: A Distributed Framework for Estimating 3-profiles of Large Graphs," Conference on Knowledge Discovery and Data Mining (KDD), August 2015.
48. K. Shanmugam, M. Asteris and A.G. Dimakis, "On approximating the sum-rate for multiple unicasts," IEEE International Symposium on Information Theory (ISIT) June 2015.
49. A.S. Rawat, Z. Song, A.G. Dimakis and A. Gal, "Batch Codes through Dense Graphs with High Girth," IEEE International Symposium on Information Theory (ISIT) June 2015.
50. M. Asteris, A. Kyrillidis, A.G. Dimakis, H.G. Yi, B. Chandrasekaran, "Stay on path: PCA along graph paths," International Conference on Machine Learning (ICML), 2015.

51. M. Kazdagli, A.S. Rawat, A.G. Dimakis, S. Vishwanath, M. Tiwari, "Understanding Contention-driven Covert Channels and using them for Defense," in Proc. of the International Symposium on High Performance Computer Architecture (HPCA), February 2015.
52. M. Kocaoglu, K. Shanmugam, A.G. Dimakis, A. Klivans, "Sparse Polynomial Learning and Graph Sketching," Proc. of Neural Information Processing Systems (NIPS), Dec. 2014.
    Selected for full oral presentation
53. R. Tandon, K. Shanmugam, P. Ravikumar, A.G. Dimakis, "On the Information Theoretic Limits of Learning Ising Models," Proc. of Neural Information Processing Systems (NIPS), Dec. 2014
54. M. Asteris, A.G. Dimakis and D.S. Papailiopoulos "Nonnegative Sparse PCA with Provable Guarantees," International Conference on Machine Learning (ICML), 2014.
55. D.S. Papailiopoulos, I. Mitliagkas, A.G. Dimakis, C. Caramanis "Finding Dense Subgraphs via Low-Rank Bilinear Optimization," International Conference on Machine Learning (ICML), 2014.
56. K. Shanmugam and A.G. Dimakis "Bounding Multiple Unicasts through Index Coding and Locally Repairable Codes," IEEE International Symposium on Information Theory (ISIT 2014).
57. A.S. Rawat, D.S. Papailiopoulos, A.G. Dimakis, and S. Vishwanath "Locality and Availability in Distributed Storage," IEEE International Symposium on Information Theory (ISIT 2014).
58. K. Shanmugam, A.G. Dimakis and M. Langberg "Graph Theory versus Minimum Rank for Index Coding," IEEE International Symposium on Information Theory (ISIT 2014).
59. K. Shanmugam, A.G. Dimakis, G. Caire "Index Coding Problem with Side Information Repositories" Allerton Conference on Communication, Control, and Computing, 2013.
60. D.S. Papailiopoulos, A.G. Dimakis, S. Korokythakis, "Sparse PCA through Low-rank Approximations," International Conference on Machine Learning (ICML), 2013.
61. A. Le, A.S. Tehrani, A.G. Dimakis, A. Markopoulou,Λ "Instantly Decodable Network Codes for Real-Time Applications," International Symposium on Network Coding (NetCod), June 2013.
62. I. Tamo, D. Papailiopoulos and A.G. Dimakis, "Optimal Locally Repairable Codes and Connections to Matroid Theory," IEEE International Symposium on Information Theory (ISIT 2013).
63. Y. Kao, A.G. Dimakis, D. Leong and T. Ho, "Distributed Storage Allocations and a Hypergraph Conjecture of Erdos," IEEE International Symposium on Information Theory (ISIT 2013).
64. A.S. Tehrani, A.G. Dimakis and G. Caire, "Optimal Measurement Matrices for Neighbor Discovery," IEEE International Symposium on Information Theory (ISIT 2013).
65. K. Shanmugam, A.G. Dimakis and M. Langberg, "Local Graph Coloring and Index Coding," IEEE International Symposium on Information Theory (ISIT 2013).

66. A.S. Tehrani, A.G. Dimakis, G. Caire, "Optimal Deterministic Compressed Sensing Matrices," ICASSP 2013.
67. N. Golrezaei, A.G. Dimakis, and A.F. Molisch, "Device-to-Device Collaboration through Distributed Storage," IEEE Globecom 2012.
68. A.S. Tehrani and A.G. Dimakis, "Finding Three Transmissions is Hard," IEEE Globecom 2012.
69. W. Xu, A.G. Dimakis and B. Hassibi, "On the Mixing Time of Markov Chain Monte Carlo for Integer Least-Square Problems," IEEE Conference on Decision and Control (CDC), Dec. 2012.
70. N. Golrezaei, A.G. Dimakis and A.F. Molisch, "Base Station Assisted Device-to-Device Communications for High-Throughput Wireless Video Networks," ICC Workshop on Video Delivery Optimization (ICC-ViOpt), pp. 7077-7081, 2012.
71. N. Golrezaei, K. Shanmugam, A.G. Dimakis, A.F. Molisch and G. Caire, "Wireless Video Content Delivery through Coded Distributed Caching," IEEE International Conference on Communications (ICC), pp. 2467-2472, 2012.
72. N. Golrezaei, A.G. Dimakis and A.F. Molisch, "Wireless Device-to-Device Communications with Distributed Caching," pp. 2781-2785, IEEE International Symposium on Information Theory (ISIT 2012).
73. M. Asteris and A.G. Dimakis, " Repairable Fountain Codes," pp. 1752-1756, IEEE International Symposium on Information Theory (ISIT 2012).
74. A.S. Tehrani, A.G. Dimakis and M.J. Neely, "Bipartite Index Coding," pp. 2246-2250, IEEE International Symposium on Information Theory (ISIT 2012).
75. D. S. Papailiopoulos, C. Suh and A.G. Dimakis "Feedback in the K-user Interference Channel," pp. 3130-3134, IEEE International Symposium on Information Theory (ISIT 2012).
76. V. Ntranos, G. Caire and A.G. Dimakis, "Allocations for Heterogenous Distributed Storage," pp. 2761-2765, IEEE International Symposium on Information Theory (ISIT 2012).
77. D.S. Papailiopoulos and A.G. Dimakis, "Storage Codes with Optimal Repair Locality," pp. 2771-2775, IEEE International Symposium on Information Theory (ISIT 2012).
78. N. Golrezaei, K. Shanmugam, A.G. Dimakis, A.F. Molisch and G. Caire, "FemtoCaching: wireless video content delivery through distributed caching helpers," IEEE Conference on Computer Communications. (INFOCOM), pp. 1107-1115, April 2012.
79. D. S. Papailiopoulos, J. Luo, A.G. Dimakis, C. Huang and J. Li "Simple Regenerating Codes: Network Coding for Cloud Storage," IEEE Conference on Computer Communications Mini-conference. (INFOCOM), pp. 2801-2805, April 2012.
80. M. Sathiamoorthy, A.G. Dimakis, B. Krishnamachari and F. Bai, "Distributed Storage Codes Reduce Latency in Vehicular Networks," IEEE Conference on Computer Communications Mini-conference. (INFOCOM), pp. 2646-2650, April 2012.
81. D. S. Papailiopoulos, A.G. Dimakis, and V. R. Cadambe, "Repair Optimal Erasure Codes through Hadamard Designs," Allerton 2011.

82. A. Khajehnejad, A. S. Tehrani, A.G. Dimakis, "Explicit Matrices for Sparse Approximation," IEEE International Symposium on Information Theory (ISIT 2011).
83. D. Leong, A.G. Dimakis, T. Ho, "Distributed Storage Allocations for Optimal Delay," IEEE International Symposium on Information Theory (ISIT 2011).
84. D. Papailiopoulos, A.G. Dimakis, "Distributed Storage Codes Through Hadamard Designs," IEEE International Symposium on Information Theory (ISIT 2011).
85. D. S. Papailiopoulos and A.G. Dimakis, "Repairing Erasure Codes," Refereed Work-In-Progress (WiP) and Poster at USENIX Conference on File and Storage Technologies (FAST) 2011.
86. A. S. Tehrani, A.G. Dimakis, M. J. Neely, "SigSag: Iterative Detection through Soft Message-Passing," IEEE Conference on Computer Communications. (INFOCOM), 2011.
87. D. Papailiopoulos, A.G. Dimakis, "Distributed Storage Codes Meet Multiple-Access Wiretap Channels," Proceedings of the 47th Annual Allerton Conference on Communication, Control and Computation, September 2010.
88. A. Khajehnejad, A.G. Dimakis, B. Hassibi, "Iterative Reweighted LP Decoding," Proceedings of the 47th Annual Allerton Conference on Communication, Control and Computation, September 2010.
89. B. Hassibi, A.G. Dimakis, D. Papailiopoulos, "MCMC Methods for Integer Least-Squares Problems," Proceedings of the 47th Annual Allerton Conference on Communication, Control and Computation, September 2010.
90. D. Papailiopoulos and A.G. Dimakis, "Interference Alignment as a Rank Constrained Rank Minimization," IEEE Global Telecommunications Conference (GLOBECOM) 2010.
91. D. Leong, A.G. Dimakis, T. Ho, "Symmetric Allocations for Distributed Storage," IEEE Global Telecommunications Conference (GLOBECOM) 2010.
92. Z. Wang, A.G. Dimakis, J. Bruck, "Rebuilding for Array Codes in Distributed Storage Systems," Workshop on the Application of Communication Theory to Emerging Memory Technologies (ACTEMT) (in conjunction with GLOBECOM), 2010.
93. Y. Lin, A. Ortega, A.G. Dimakis, "Sparse Recovery for Discrete Tomography," IEEE International Conference on Image Processing (ICIP), 2010.
94. M. J. Neely, A. S. Tehrani, A.G. Dimakis "Efficient Algorithms for Renewable Energy Allocation to Delay Tolerant Consumers," First IEEE International Conference on Smart Grid Communications. (SmartGridComm), 2010.
95. T.K. Dikaliotis, A.G. Dimakis, T. Ho, M. Effros, "On the Delay Advantage of Coding in Packet Erasure Networks," IEEE Information Theory Workshop, Dublin (ITW 2010).
96. T.K. Dikaliotis, A.G. Dimakis, T. Ho, "Security in Distributed Storage Systems by Communicating a Logarithmic Number of Bits," IEEE International Symposium on Information Theory (ISIT 2010).
97. D. Leong, A.G. Dimakis, T. Ho, "Distributed Storage Allocation for High Reliability," IEEE International Conference on Communications (ICC) 2010.

98. A.G. Dimakis, R. Smarandache, P.O. Vontobel, "Channel coding LP decoding and compressed sensing LP decoding: further connections," Proc. 2010 International Zurich Seminar on Communications, 2010.
99. A.G. Dimakis and P.O. Vontobel,"LP Decoding Meets LP Decoding: A Connection between Channel Coding and Compressed Sensing," Proceedings of the 47th Annual Allerton Conference on Communication, Control and Computation, September 2009.
100. T,C. Aysal, A.D. Sarwate, A.G. Dimakis , "Reaching Consensus in Wireless Networks with Probabilistic Broadcast," Proceedings of the 47th Annual Allerton Conference on Communication, Control and Computation, September 2009.
101. D. Cullina, A.G. Dimakis, T. Ho, "Searching for Minimum Storage Regenerating Codes," Proceedings of the 47th Annual Allerton Conference on Communication, Control and Computation, September 2009.
102. A.D. Sarwate, A.G. Dimakis, "Gossip and consensus in mobile networks," Proc. of he Third International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP) 2009.
103. M. Hansen, B. Hassibi, A.G. Dimakis, W. Xu "Near-Optimal Detection in MIMO Systems using Gibbs Sampling," IEEE Global Communications Conference (GLOBECOM), 2009.
104. Y. Wu and A.G. Dimakis "Reducing Repair Traffic for Erasure Coding-Based Storage via Interference Alignment," IEEE International Symposium on Information Theory (ISIT), 2009
105. T. Dikaliotis, A.G. Dimakis, T. Ho, M. Effros, "On the Delay of Network Coding over Line Networks," IEEE International Symposium on Information Theory (ISIT), 2009
106. D. Leong A.G. Dimakis, T. Ho "Distributed Storage Allocation Problems," Network Coding Workshop (NetCod), 2009.
107. M. A. Khajehnejad A.G. Dimakis, B. Hassibi, "Nonnegative Compressed Sensing with Minimal Perturbed Expanders," Digital Signal Processing Workshop 2009.
108. B. Nazer, A.G. Dimakis, and M. Gastpar, "Neighborhood Gossip: Concurrent Averaging through Local Interference," Proceedings of the IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP), Taipei, Taiwan, April 2009.
109. A.D. Sarwate and A.G. Dimakis, "The Impact of Mobility on Gossip Algorithms," IEEE Conference on Computer Communications. (INFOCOM), April 2009.
110. B. Nazer, A.G. Dimakis, and M. Gastpar, "Local Interference Can Accelerate Gossip Algorithms," Proceedings of the 46th Annual Allerton Conference on Commununication, Control and Computation, September 2008.
111. A.G. Dimakis, J. Wang and K. Ramchandran, "Unequal Growth Codes: Intermediate Performance and Unequal Error Protection for Video Streaming," International workshop on Multimedia Signal Processing. (MMSP) October 2007. **Best student paper runner-up**
112. Y. Wu, A.G. Dimakis and K. Ramchandran, "Deterministic Regenerating Codes for Distributed Storage," Forty-Fifth Annual Allerton Conference, September 2007.

113. F. Benezit, A.G. Dimakis, P. Thiran and M. Vetterli, "Gossip Along the Way: Order-Optimal Consensus through Randomized Path Averaging," Forty-Fifth Annual Allerton Conference, September 2007.
114. A.G. Dimakis, M. J. Wainwright and K. Ramchandran, "Lower bounds on the rate-distortion function of LDGM codes," Information Theory workshop (ITW) 2007.
115. A.G. Dimakis, P. B. Godfrey, M. J. Wainwright and K. Ramchandran "Network Coding for Distributed Storage Systems," IEEE Conference on Computer Communications. (INFOCOM), May 2007.
116. J. Schiff, D. Antonelli, A.G. Dimakis, D. Chu and M. Wainwright "Robust Message-Passing for Statistical Inference in Sensor Networks," ACM/IEEE Symposium on Information Processing in Sensor Networks (IPSN) 2007.
117. C. Daskalakis, A.G. Dimakis, R. Karp and M. J. Wainwright, "Probabilistic Analysis of Linear Programming Decoding". SIAM Symposium on Discrete Algorithms (SODA), January 2007.
118. A.G. Dimakis, P. B. Godfrey, M. J. Wainwright and K. Ramchandran "On the benefits of Network coding for peer-to-peer storage," Third Workshop on Network Coding, Theory, and Applications (NetCod), January 2007.
119. A.G. Dimakis, A.D. Sarwate, and M.J. Wainwright, "Geographic Gossip: Efficient Aggregation for Sensor Networks". ACM/IEEE Symposium on Information Processing in Sensor Networks (IPSN). 2006.
120. A.G. Dimakis, M.J. Wainwright, "Guessing Facets: Improved LP decoding and Polytope structure," IEEE International Symposium on Information Theory (ISIT) , 2006.
121. A.G. Dimakis V. Prabhakaran K. Ramchandran "Distributed Fountain Codes for Networked Storage," IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) May 2006.
122. A.G. Dimakis, V. Prabhakaran, K. Ramchandran, "Ubiquitus Access to Distributed Data in Large-Scale Sensor Networks Through Decentralized Erasure Codes," IEEE/ACM Symposium on Information Processing in Sensor Networks (IPSN). 2005
Best Paper Award.
123. A.G. Dimakis, V. Prabhakaran, K. Ramchandran, "Distributed Data Storage in Sensor Networks using Decentralized Erasure Codes," Asilomar Conference on Signals, Systems, and Computers, November 2004.
124. A.G. Dimakis, P. Maragos,"Modeling Resonances with Phase Modulated Self-Similar Processes," IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP) May 2004.
125. P. Maragos, A.G. Dimakis, I. Kokkinos, "Some advances in nonlinear Speech Modeling using Modulations, Fractals and Chaos," IEEE International Conference on Digital Signal Processing (DSP), July 2002.

Professional Service

Reviewer for: IEEE Transactions on Information Theory, Random Structures and Algorithms, Proceedings of the National Academy of Science (PNAS), ACM Transactions on Sensor Networks, ACM/SIAM Symposium on Discrete Algorithms (SODA), ACM Symposium on Theory of Computing (STOC), Neural Information Processing (NIPS), International Conference on Machine Learning (ICML), Conference on Learning Theory (COLT), Information Processing in Sensor Networks (IPSN), IEEE International Conference on Acoustics Speech

and Signal Processing (ICASSP), IEEE International Conference on Image Processing (ICIP), International symposium on Information Theory (ISIT).

Associate Editor IEEE Signal Processing Letters. Since Jan. 2012

Associate Editor IEEE Transactions on Information Theory. Since August 2014.