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LIST OF THREE SIGNIFICANT PUBLICATIONS, SUBMISSIONS AND PREPRINTS

F. Shirani Chaharsooghi, S. Garg, E. Erkip, *A Concentration of Measure Approach to Matching of Correlated Graphs*, to be submitted to IEEE Transactions on Information Theory (earlier version appeared in [C6,9,12]).

F. Shirani Chaharsooghi, S. Pradhan, *On the Sub-optimality of Single-Letter Coding in Networks*, IEEE Transactions on Information Theory, vol. 65, no. 10, pp. 6115-6135, Oct. 2019.

S. Shahsavari, **F. Shirani Chaharsooghi**, E. Erkip, *A General Framework for Temporal Fair User Scheduling in NOMA Systems*, IEEE Journal on Selected Topics on Signal Processing, vol. 13, no. 3, pp. 408-422, 2019.

COMPLETE LIST OF PUBLICATIONS, SUBMISSIONS AND PREPRINTS

Journals: Accepted Papers

[J1] **F. Shirani Chaharsooghi**, S. Pradhan, *On the Sub-optimality of Single-Letter Coding in Networks*, IEEE Transactions on Information Theory, vol. 65, no. 10, pp. 6115-6135, Oct. 2019.

[J2] H. Heidari, **F. Shirani Chaharsooghi**, S. Pradhan, *Quasi Structured Codes for Multi-Terminal Communications*, IEEE Transactions on Information Theory, vol. 65, no. 10, pp. 6263-6289, Oct. 2019.

[J3] S. Shahsavari, **F. Shirani Chaharsooghi**, E. Erkip, *A General Framework for Temporal Fair User Scheduling in NOMA Systems*, IEEE Journal on Selected Topics on Signal Processing, vol. 13, no. 3, pp. 408-422, 2019.

[J4] **F. Shirani Chaharsooghi**, S. Pradhan, *An achievable rate-distortion region for multiple descriptions source coding based on coset codes*, IEEE Transactions on Information Theory, vol. 64, no. 5, pp. 3781-3809, 2018.

Journals: Preprints/Working Papers

[J5] **F. Shirani Chaharsooghi**, S. Pradhan, *A New Achievable Rate-Distortion Region for Distributed Source Coding*, submitted to IEEE Transactions on Information Theory (earlier version appeared in [C23,25]).

[J6] A. Khalili, **F. Shirani Chaharsooghi**, E. Erkip, Y. C. Eldar, *On MIMO Communication with Low Resolution Quantization at the Receivers*, to be submitted to IEEE Transactions on Wireless Communications (earlier version appeared in [C3,4]).

[J7] **F. Shirani Chaharsooghi**, S. Garg, E. Erkip, *A Concentration of Measure Approach to Matching of Correlated Graphs*, to be submitted to IEEE Transactions on Information Theory (earlier version appeared in [C6,9,12]).

[J8] **F. Shirani Chaharsooghi**, S. Pradhan, *Lattices from linear codes and fine quantization: general continuous sources and channels*, to be submitted to IEEE Transactions on Information Theory (earlier version appeared in [C8,24]).

Conference Publications

[C1] S. Shahsavari, **F. Shirani Chaharsooghi**, A. Khojastepour, E. Erkip, *Opportunistic Temporal Fair Mode Selection and User Scheduling for Full-duplex Systems*, 2019 IEEE 30th Annual International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC), Accepted: June 2019.

[C2] **F. Shirani Chaharsooghi**, S. Garg, E. Erkip, *A Concentration of Measure Approach to Database De-anonymization*, 2019 IEEE International Symposium on Information Theory (ISIT), pp. 2748-2752, 2019.

[C3] A. Khalili, **F. Shirani Chaharsooghi**, E. Erkip, Y. C. Eldar, *Tradeoff Between Delay and High SNR Capacity in Quantized MIMO Systems*, 2019 IEEE International Symposium on Information Theory (ISIT), pp. 597-601, 2019.

[C4] A. Khalili, **F. Shirani Chaharsooghi**, E. Erkip, Y. C. Eldar, *On Multiterminal Communication over MIMO Channels with One-bit ADCs at the Receivers*, 2019 IEEE International Symposium on Information Theory (ISIT), pp. 602-606, 2019.

[C5] S. Shahsavari, **F. Shirani Chaharsooghi**, E. Erkip, *On the Fundamental Limits of Multi-user Scheduling under Short-term Fairness Constraints*, 2019 IEEE International Symposium on Information Theory (ISIT), pp. 408-422, 2019.

[C6] **F. Shirani Chaharsooghi**, S. Garg, E. Erkip, *Matching graphs with community structure: a concentration of measure approach*, 56th IEEE Annual Allerton Conference on Communication, Control, and Computing, pp. 1028-1035, 2018

[C7] S. Shahsavari, **F. Shirani Chaharsooghi**, E. Erkip, *Opportunistic temporal fair scheduling for non-orthogonal multiple access*, 56th IEEE Annual Allerton Conference on Communication, Control, and Computing, pp. 391-398, 2018

[C8] **F. Shirani Chaharsooghi**, S. Pradhan, *Lattices from linear codes and fine quantization: general continuous sources and channels*, IEEE International Symposium on Information Theory (ISIT), pp. 2356-2360, 2018.

[C9] **F. Shirani Chaharsooghi**, S. Garg, E. Erkip, *Typicality matching for pairs of correlated graphs*, IEEE International Symposium on Information Theory (ISIT), pp. 221-225, 2018.

[C10] M. Heidari, **F. Shirani Chaharsooghi**, S. Pradhan, *Bounds on the effective-length of optimal codes for interference channel with feedback*, IEEE International Symposium on Information Theory (ISIT), pp. 1126-1130, 2018.

[C11] **F. Shirani Chaharsooghi**, S. Garg, E. Erkip, *Optimal active social network de-anonymization using information thresholds*, IEEE International Symposium on Information Theory (ISIT), pp. 1445-1449, 2018.

[C12] **F. Shirani Chaharsooghi**, S. Garg, E. Erkip, *Seeded graph matching: efficient algorithms and theoretical guarantees*, 51st Asilomar Conference on Signals, Systems, and Computers, pp. 253-257, 2017.

[C13] **F. Shirani Chaharsooghi**, S. Garg, E. Erkip, *An information theoretic framework for active de-anonymization in social networks based on group memberships*, 55th Annual Allerton Conference on Communication, Control, and Computing, pp. 470-477, 2017.

[C14] **F. Shirani Chaharsooghi**, S. Pradhan, *On the sub-optimality of single-letter coding in multi-termianl communications*, IEEE International Symposium on Information Theory (ISIT), pp. 1823-1827, 2017.

[C15] **F. Shirani Chaharsooghi**, S. Pradhan, *On the correlation between boolean functions of random variables*, IEEE International Symposium on Information Theory (ISIT), pp. 1301-1305, 2017.

[C16] M. Heidari, **F. Shirani Chaharsooghi** , S. Pradhan, *A new achievable rate region for the multiple-access channel with states*, IEEE International Symposium on Information Theory (ISIT), pp. 36-40, 2017.

[C17] M. Heidari, **F. Shirani Chaharsooghi** , S. Pradhan, *On the necessity of structured codes for communication over MAC with feedback*, IEEE International Symposium on Information Theory (ISIT), pp. 2298-2302, 2017.

[C18] **F. Shirani Chaharsooghi** , S. Pradhan, *Trade-off between communication and cooperation in the interference channel*, IEEE International Symposium on Information Theory (ISIT), pp. 2214-2218, 2016.

[C19] **F. Shirani Chaharsooghi** , M. Heidari, S. Pradhan, *Quasi linear codes: application to point-to-point and multi-terminal source coding*, IEEE International Symposium on Information Theory (ISIT), pp. 730-734, 2016.

[C20] M. Heidari, **F. Shirani Chaharsooghi** , S. Pradhan, *New sufficient conditions for multiple-access channel with correlated sources*, IEEE International Symposium on Information Theory (ISIT), pp. 2019-2023, 2016.

[C21] M. Heidari, **F. Shirani Chaharsooghi** , S. Pradhan, *Beyond group capacity in multi-terminal communications*, IEEE International Symposium on Information Theory (ISIT), pp. 2081-2085, 2015.

[C22] **F. Shirani Chaharsooghi** , M. Heidari, S. Pradhan, *New lattices for multiple-descriptions*, IEEE International Symposium on Information Theory (ISIT), pp. 1580-1584, 2015.

[C23] **F. Shirani Chaharsooghi**, S. Pradhan, *Finite-length gains in distributed source coding*, IEEE International Symposium on Information Theory (ISIT), pp. 1702-1706, 2014.

[C24] **F. Shirani Chaharsooghi** , S. Pradhan, *An achievable rate-distortion region for the multiple-descriptions problem*, IEEE International Symposium on Information Theory (ISIT), pp. 576-580, 2014.

[C25] **F. Shirani Chaharsooghi** , A. Ghasemian Sahebi, S. Pradhan, *Distributed source coding in absence of common components*, IEEE International Symposium on Information Theory (ISIT), pp. 1362-1366, 2013.

[C26] **F. Shirani Chaharsooghi** , M. Emadi, M. Zamanighomi and M. R. Aref, *A new method for variable elimination in systems of inequations*, IEEE International Symposium on Information theory (ISIT), pp. 1215-1219, 2011.

[C27] M. Zamanighomi, M. Emadi, **F. Shirani Chaharsooghi**, M. R. Aref, *Achievable rate region for multiple access channel with correlated channel states and cooperating encoders*, IEEE Information Theory Workshop (ITW), pp. 628-632, 2011.