

Recent Journal Publications (2015-2016)

I. Singh, and K. Giridhar, "New results on perfect channel shortening schemes for MIMO OFDM systems", in *Transactions on Emerging Telecommunications Technologies*, vol. 26, no. 7, pp. 1031-1038, Jul. 2015.

S. Kumar, S. Kalyani and K. Giridhar, "Spectrum Allocation for ICIC-Based Picocell," in *IEEE Transactions on Vehicular Technology*, vol. 64, no. 8, pp. 3494-3504, Aug. 2015.

S. Kumar, S. Kalyani, L. Hanzo and K. Giridhar, "Coverage Probability and Achievable Rate Analysis of FFR-Aided Multi-User OFDM-Based MIMO and SIMO Systems," in *IEEE Transactions on Communications*, vol. 63, no. 10, pp. 3869-3881, Oct. 2015.

I. Singh, S. Kalyani and K. Giridhar, "A Practical Compressed Sensing Approach for Channel Estimation in OFDM Systems," in *IEEE Communications Letters*, vol. 19, no. 12, pp. 2146-2149, Dec. 2015.

S. Kumar, S. Kalyani and K. Giridhar, "Optimal design parameters for coverage probability in fractional frequency reuse and soft frequency reuse," in *IET Communications*, vol. 9, no. 10, pp. 1324-1331, 7 2 Oct. 2015.

V. A. Thomas, S. Kumar, S. Kalyani, M. El-Hajjar, K. Giridhar and L. Hanzo, "Error Vector Magnitude Analysis of Fading SIMO Channels Relying on MRC Reception," in *IEEE Transactions on Communications*, vol. 64, no. 4, pp. 1786-1797, April 2016.

S.V. Ramanan, and K. Giridhar, "On the Dependency between User Detection and Timing Advancement in LTE Ranging Channels", accepted for publication in *IEEE Communications Letters* (to appear in 2016).

K.P. Saishankar, S. Kalyani, L. Hanzo, and K. Giridhar, "Predicting the affordable rate in interference limited cellular systems using higher order Markov models," accepted to the IEEE Access Journal (July 2016).

S. Gupta, S. Kumar, R. Zhang, S. Kalyani, K. Giridhar, and L. Hanzo, "Resource Allocation for D2D Links in the FFR and SFR Aided Cellular Downlink", accepted for publication in *IEEE Transactions on Communications*(Aug.2016).

Recent Patents – granted by the US PTO

K. Kuchi, K. Milleth, V. Ramaswamy, B. Dhivagar, K. Giridhar, B. Ramamurthi, M. K. Dileep, K. Padmanabhan, G. George, K. Prasanth, and Y. S. Reddy, "Pilot aided data transmission and reception with interference mitigation in wireless systems," granted US Patent 9030992 B2, published on May 12, 2015.

K. Kuchi, K. Milleth, V. Ramaswamy, B. Dhivagar, K. Giridhar, B. Ramamurthi, M. K. Dileep, and K. Padmanabhan, "Precoding for single transmission streams in multiple antenna systems Granted US Patent," granted US Patent 9083399, published on July 14, 2015.

S. Kalyani, R. Lakshminarayanan, and K. Giridhar, "Robust channel estimation of OFDM systems," US PTO application number 13/702,074, patent granted in Oct. 2015.

K. Giridhar, N. Vinoth, A. Ayyar, B. Ramamurthi, S. Sendilramkumar, V. Ganesh, and K. Kuchi, "Interference cancelling block modulation", US patent 9338038, granted on May 10, 2016.