## Publications of Jamie Scott Evans

## Journal Papers

- [1] V. Krishnamurthy and J. S. Evans, "Finite dimensional filters for passive tracking of Markov jump linear systems," *Automatica*, vol. 34, pp. 765–770, June 1998.
- [2] J. S. Evans and D. Everitt, "Effective bandwidth based admission control for multi-service CDMA cellular networks," *IEEE Trans. Veh. Technol.*, vol. 48, pp. 36–46, Jan. 1999.
- [3] J. S. Evans and D. Everitt, "On the teletraffic capacity of CDMA cellular networks," *IEEE Trans. Veh. Technol.*, vol. 48, pp. 153–165, Jan. 1999.
- [4] J. S. Evans and V. Krishnamurthy, "Optimal filtering of doubly stochastic auto-regressive processes," *Automatica*, vol. 35, pp. 241–250, Feb. 1999.
- [5] J. S. Evans and V. Krishnamurthy, "Exact filters for doubly stochastic AR models with conditionally Poisson observations," *IEEE Trans. Auto. Control*, vol. 44, pp. 794–798, Apr. 1999.
- [6] J. S. Evans and V. Krishnamurthy, "Hidden Markov model state estimation with randomly delayed observations," *IEEE Trans. Signal Proc.*, vol. 47, pp. 2157–2166, Aug. 1999.
- [7] J. S. Evans and R. J. Evans, "Image-enhanced multiple model tracking," *Automatica*, vol. 35, pp. 1769–1786, Nov. 1999.
- [8] J. S. Evans and D. N. C. Tse, "Large system performance of linear multiuser receivers in multipath fading channels," *IEEE Trans. Information Theory*, vol. 46, pp. 2059–2078, Sept. 2000.
- [9] J. S. Evans and V. Krishnamurthy, "Optimal sensor scheduling for hidden Markov model state estimation," *International Journal of Control*, vol. 74, pp. 1737–1742, Dec. 2001.
- [10] J. S. Evans, "Optimal resource allocation for pilot symbol aided multiuser receivers in Rayleigh faded CDMA channels," *IEEE Trans. Communications*, vol. 50, pp. 1316–1325, Aug. 2002.
- [11] L. G. F. Trichard, J. S. Evans, and I. B. Collings, "Large system analysis of linear multistage parallel interference cancellation," *IEEE Trans. Communications*, vol. 50, pp. 1778–1786, Nov. 2002.
- [12] L. G. F. Trichard, J. S. Evans, and I. B. Collings, "Large system performance of second-order linear multistage CDMA receivers," *IEEE Trans. Wireless Communications*, vol. 2, pp. 591–600, May 2003.
- [13] K. Yu, J. S. Evans, and I. B. Collings, "Performance analysis of LMMSE receivers for M-ary QAM in Rayleigh faded CDMA channels," *IEEE Trans. Veh. Technol.*, pp. 1242–1253, Sept. 2003.
- [14] S. Dey and J. S. Evans, "Optimal power control over multiple time-scale fading channels with service outage constraints," *IEEE Trans. Communications*, vol. 53, pp. 708–717, Apr. 2005.

- [15] L. G. F. Trichard, J. S. Evans, and I. B. Collings, "Optimal linear multistage multiuser receivers," *IEEE Trans. Wireless Communications*, vol. 4, pp. 1092–1101, May 2005.
- [16] W. Chen, R. S. Tucker, X. Yi, W. Shieh, and J. S. Evans, "Optical signal-to-noise ratio monitoring using uncorrelated beat noise," *Photonics Technology Letters*, vol. 17, pp. 2484– 2486, Nov. 2005.
- [17] J. Papandriopoulos, J. S. Evans, and S. Dey, "Optimal power control for Rayleigh-faded multiuser systems with outage constraints," *IEEE Trans. Wireless Communications*, vol. 4, pp. 2705–2715, Nov. 2005.
- [18] J. Papandriopoulos, J. S. Evans, and S. Dey, "Outage-based optimal power control for generalized multiuser fading channels," *IEEE Trans. Communications*, vol. 54, pp. 693–703, Apr. 2006.
- [19] D. Aktas, M. N. Bacha, J. S. Evans, and S. V. Hanly, "Scaling results on the sum capacity of cellular networks with MIMO links," *IEEE Trans. Information Theory*, vol. 54, pp. 3264–3274, July 2006.
- [20] L. Palmer, P. M. Farrell, S. D. Dods, and J. S. Evans, "Frequency-correlation analysis of PMD emulators with symmetric polarization scrambling," *IEEE Journal of Lightwave Technology*, vol. 24, pp. 3897–3906, Nov. 2006.
- [21] A. Leong, S. Dey, and J. S. Evans, "Probability of error analysis for hidden Markov model filtering with random packet loss," *IEEE Trans. Signal Proc.*, vol. 55, pp. 809–821, Mar. 2007.
- [22] W. Chen, F. Buchali, X. Yi, W. Shieh, J. S. Evans, and R. S. Tucker, "Chromatic dispersion and PMD mitigation at 10 Gb/s using Viterbi equalization for DPSK and DQPSK modulation formats," *Optics Express*, vol. 15, pp. 5271–5276, Apr. 2007.
- [23] S. Dey and J. S. Evans, "Outage capacity and optimal power allocation for multiple time-scale parallel fading channels," *IEEE Trans. Wireless Communications*, vol. 6, pp. 2369–2373, July 2007.
- [24] L. Chen, B. Krongold, and J. S. Evans, "Adaptive resource allocation in OFDMA systems with fairness and QoS constraints," *European Transactions on Telecommunications*, vol. 18, pp. 549–562, 2007. (Invited Paper).
- [25] A. Leong, S. Dey, and J. S. Evans, "Error exponents for Neyman-Pearson detection of Markov chains in noise," *IEEE Trans. Signal Proc.*, vol. 55, pp. 5097–5103, Oct. 2007.
- [26] E. Aktas, J. S. Evans, and S. V. Hanly, "Distributed decoding in a cellular multiple-access channel," *IEEE Trans. Wireless Communications*, vol. 7, pp. 241–250, Jan. 2008.
- [27] J. Li, S. Dey, and J. S. Evans, "Maximal lifetime power and rate allocation for wireless sensor systems with data distortion constraints," *IEEE Trans. Signal Proc.*, vol. 56, pp. 2076–2090, May 2008.
- [28] A. Leong, S. Dey, and J. S. Evans, "On Kalman smoothing with random packet loss," *IEEE Trans. Signal Proc.*, vol. 56, pp. 3346–3351, July 2008.
- [29] B. L. Ng, J. S. Evans, S. V. Hanly, and D. Aktas, "Distributed downlink beamforming with cooperative base stations," *IEEE Trans. Information Theory*, vol. 54, pp. 5491–5499, Dec. 2008.
- [30] J. Papandriopoulos, S. Dey, and J. S. Evans, "Optimal and distributed protocols for cross-layer design of physical & transport layers in MANETs," *IEEE/ACM Trans. Networking*, vol. 16, pp. 1392–1405, Dec. 2008.

- [31] J. Papandriopoulos and J. S. Evans, "SCALE: A low-complexity distributed protocol for spectrum balancing in multiuser DSL networks," *IEEE Trans. Information Theory*, vol. 55, pp. 3711–3724, Aug. 2009.
- [32] S. Dey, A. Leong, and J. S. Evans, "Kalman filtering with faded measurements," *Automatica*, vol. 45, pp. 2223–2233, Oct. 2009.
- [33] S. Bhaskaran, S. Hanly, N. Badruddin, and J. S. Evans, "Maximizing the sum rate in symmetric networks of interfering links," *IEEE Trans. Information Theory*, vol. 56, pp. 4471–4487, Sept. 2010.
- [34] M. Rezaeian, B.-N. Vo, and J. S. Evans, "The optimal observability of partially observable Markov decision processes: Discrete state space," *IEEE Trans. Auto. Control*, pp. 2793–2798, Dec. 2010.
- [35] A. Leong, S. Dey, and J. S. Evans, "Asymptotics and power allocation for state estimation over fading channels," *IEEE Trans. Aerospace and Electronic Systems*, vol. 47, pp. 611–633, Jan. 2011.
- [36] F. Li, J. S. Evans, and S. Dey, "Decision fusion over noncoherent fading multiaccess channels," *IEEE Trans. Signal Proc.*, vol. 59, pp. 4367–4380, Sept. 2011.
- [37] L. Chen, B. Krongold, and J. S. Evans, "A tone reservation based optical OFDM system for short-range IM/DD transmission," *IEEE Journal of Lightwave Technology*, pp. 3824–3833, Dec. 2011.
- [38] L. Chen, B. Krongold, and J. S. Evans, "Performance analysis for optical OFDM transmission in short-range IM/DD systems," *IEEE Journal of Lightwave Technology*, vol. 30, pp. 974–983, Apr. 2012.
- [39] F. Li, J. S. Evans, and S. Dey, "Design of distributed detection schemes for multiaccess channels," *IEEE Trans. Aerospace and Electronic Systems*, vol. 48, pp. 1552–1569, Apr. 2012.
- [40] L. Chen, B. Krongold, and J. S. Evans, "Theoretical characterization of nonlinear clipping effects in IM/DD optical OFDM systems," *IEEE Trans. Communications*, vol. 60, pp. 2304–2312, Aug. 2012.
- [41] J. Scarlett, J. S. Evans, and S. Dey, "Compressed sensing with prior information: Informationtheoretic limits and practical decoders," *IEEE Trans. Signal Proc.*, vol. 61, pp. 427–439, Jan. 2013.
- [42] A. Limmanee, S. Dey, and J. S. Evans, "Service-outage capacity maximization in cognitive radio for parallel fading channels," *IEEE Trans. Communications*, vol. 61, pp. 507–520, Feb. 2013.
- [43] T. Samarasinghe, H. Inaltekin, and J. S. Evans, "Optimal selective feedback policies for opportunistic beamforming," *IEEE Trans. Information Theory*, vol. 59, pp. 2897–2913, May 2013.
- [44] T. Samarasinghe, H. Inaltekin, and J. S. Evans, "The feedback-capacity tradeoff for opportunistic beamforming under optimal user selection," *Performance Evaluation*, vol. 70, pp. 472–492, July 2013.
- [45] R. Muharar, R. Zakhour, and J. S. Evans, "Optimal power allocation and user loading for multiuser MISO channels with regularized channel inversion," *IEEE Trans. Communications*, vol. 61, pp. 5030–5041, Dec. 2013.

- [46] T. Samarasinghe, H. Inaltekin, and J. S. Evans, "On optimal downlink coverage in Poisson cellular networks with power density constraints," *IEEE Trans. Communications*, vol. 62, pp. 1382–1392, Apr. 2014.
- [47] R. Senanayake, P. L. Yeoh, and J. S. Evans, "On the bit error probability of optimal multiuser detectors in cooperative cellular networks," *IEEE Trans. Veh. Technol.*, vol. 63, pp. 2472–2478, June 2014.
- [48] R. Muharar, R. Zakhour, and J. S. Evans, "Base station cooperation with feedback optimization: A large system analysis," *IEEE Trans. Information Theory*, vol. 60, pp. 3620–3644, June 2014.
- [49] T. Samarasinghe, H. Inaltekin, and J. S. Evans, "On the outage capacity of opportunistic beamforming with random user locations," *IEEE Trans. Communications*, vol. 62, pp. 3015–3026, Aug. 2014.
- [50] N. Badruddin, J. S. Evans, and S. Hanly, "Binary power allocation in symmetric Wyner-type interference networks," *IEEE Trans. Wireless Communications*, vol. 13, pp. 6903–6914, Dec. 2014.
- [51] M. Wang, T. Samarasinghe, and J. S. Evans, "Optimizing user selection schemes in vector broadcast channels," *IEEE Trans. Communications*, vol. 63, pp. 565–577, Feb. 2015.
- [52] R. Senanayake, P. Smith, P. L. Yeoh, and J. S. Evans, "An SNR approximation for distributed massive MIMO with zero forcing," *IEEE Communications Letters*, vol. 19, pp. 1885–1888, Nov. 2015.
- [53] R. Senanayake, P. L. Yeoh, and J. S. Evans, "Performance analysis of centralized and partially decentralized cooperative networks," *IEEE Trans. Communications*, vol. 64, pp. 863–875, Feb. 2016.
- [54] T. Samarasinghe, H. Inaltekin, and J. S. Evans, "Modeling and analysis of opportunistic beamforming for Poisson wireless networks," *IEEE Trans. Wireless Communications*, vol. 15, pp. 3732–3745, May 2016.
- [55] S. Atapattu and J. S. Evans, "Optimal energy harvesting protocols for wireless relay networks," *IEEE Trans. Wireless Communications*, vol. 15, pp. 5789–5803, Aug. 2016.
- [56] N. Zlatanov, D. Hranilovic, and J. S. Evans, "Buffer-aided relaying improves throughput of full-duplex relay networks with fixed-rate transmissions," *IEEE Communications Letters*, vol. 20, pp. 2446–2449, Dec. 2016.
- [57] R. Senanayake, P. Smith, P. Martin, and J. S. Evans, "Performance analysis of reconfigurable antenna arrays," *IEEE Trans. Communications*, vol. 65, pp. 2726–2739, June 2017.
- [58] Y. Hu, Y. Hong, and J. S. Evans, "Angle-of-arrival dependent interference modelling in Rician massive MIMO," *IEEE Trans. Veh. Technol.*, vol. 66, pp. 6171–6183, July 2017.
- [59] S. Atapattu, P. Dharmawansa, C. Tellambura, and J. S. Evans, "Exact outage analysis of multiple-user downlink with MIMO matched-filter precoding," *IEEE Communications Letters*, vol. 21, pp. 2754–2757, Dec. 2017.
- [60] Y. Hu, Y. Hong, and J. S. Evans, "Interference modelling in an urban microcell with full dimensional MIMO," *IEEE Trans. Veh. Technol.*, vol. 67, pp. 1347–1362, Feb. 2018.
- [61] R. Senanayake, S. Atapattu, J. S. Evans, and P. Smith, "Decentralized relay selection in multiuser multihop decode-and-forward relay networks," *IEEE Trans. Wireless Communications*, vol. 17, pp. 3313–3326, May 2018.

- [62] Y. Sarikaya, H. Inaltekin, T. Alpcan, and J. S. Evans, "Stability and dynamic control of underlay mobile edge networks," *IEEE Trans. Mobile Computing*, vol. 17, pp. 2195–2208, Sept. 2018.
- [63] X. Guo, Y. He, S. Atapattu, S. Dey, and J. S. Evans, "Power allocation for distributed detection systems in wireless sensor networks with limited fusion center feedback," *IEEE Trans. Communications*, vol. 66, pp. 4753–4766, Oct. 2018.
- [64] Y. He, S. Atapattu, C. Tellambura, and J. S. Evans, "Opportunistic group antenna selection in spatial modulation systems," *IEEE Trans. Communications*, vol. 66, pp. 5317–5331, Nov. 2018.
- [65] R. Fan, S. Atapattu, W. Chen, Y. Zhang, and J. S. Evans, "Throughput maximization for multi-hop decode-and-forward relay network with wireless energy harvesting," *IEEE Access*, vol. 6, pp. 24582–24595, Dec. 2018.
- [66] A. Zappone, S. Atapattu, M. Di Renzo, J. S. Evans, and M. Debbah, "Energy-efficient relay assignment and power control in multi-user and multi-relay networks," *IEEE Wireless Communications Letters*, vol. 7, pp. 1070–1073, Dec. 2018.
- [67] S. Atapattu, N. Ross, Y. Jing, Y. He, and J. S. Evans, "Physical-layer security in full-duplex multi-hop multi-user wireless network with relay selection," *IEEE Trans. Wireless Communi*cations, vol. 18, pp. 1216–1232, Feb. 2019.
- [68] S. Atapattu, P. Dharmawansa, M. Di Renzo, C. Tellambura, and J. S. Evans, "Multi-user relay selection for full-duplex radio," *IEEE Trans. Communications*, vol. 67, pp. 955–972, Feb. 2019.
- [69] R. Senanayake, P. Smith, P. Dmochowski, and J. S. Evans, "Distributed spectrum sensing for cognitive radio networks based on the sphericity test," *IEEE Trans. Communications*, vol. 67, pp. 1831–1844, Mar. 2019.
- [70] Z. Wang, T. Alpcan, J. S. Evans, and S. Dey, "Truthful mechanism design for wireless powered network with channel gain reporting," *IEEE Trans. Communications*, vol. 67, pp. 7966–7979, Nov. 2019.
- [71] T. N. Cao, A. Ahmadzadeh, V. Jamali, W. Wicke, P. L. Yeoh, J. S. Evans, and R. Schober, "Diffusive mobile MC with absorbing receivers: Stochastic analysis and applications," *IEEE Trans. Molecular, Biological, and Multi-Scale Communications*, vol. 5, pp. 84–99, Nov. 2019.
- [72] R. Senanayake, P. Smith, P. Dmochowski, A. Giorgetti, and J. S. Evans, "Mixture detectors for improved spectrum sensing," *IEEE Trans. Wireless Communications*, vol. 19, pp. 4335–4348, June 2020.
- [73] S. Gayan, R. Senanayake, H. Inaltekin, and J. S. Evans, "Low-resolution quantization in phase modulated systems: Optimum detectors and error rate analysis," *IEEE Open Journal of the Communications Society*, vol. 1, pp. 1000–10021, 2020.
- [74] S. Atapattu, R. Fan, P. Dharmawansa, G. Wang, J. S. Evans, and T. Tsiftsis, "Reconfigurable intelligent surface assisted two–way communications: Performance analysis and optimization," *To appear in IEEE Trans. Communications*.

# **Book Chapters**

[1] J. S. Evans and D. Everitt, "Infinite server traffic models for CDMA cellular mobile networks," in *Multiaccess, Mobility and Teletraffic for Personal Communications* (B. Jabbari, P. Godlewski, and X. Lagrange, eds.), pp. 157–170, Kluwer Academic Publishers, 1996.

- [2] J. S. Evans and R. J. Evans, "Image enhanced tracking of maneuvering targets," in *Defence Applications of Signal Processing* (D. Cochran, W. Moran, and L. B. White, eds.), pp. 61–69, Elsevier, 2001.
- [3] E. Aktas, D. Aktas, S. V. Hanly, and J. S. Evans, "Turbo base stations," in *Cooperative Cellular Wireless Networks* (E. Hossein, D. I. Kim, and V. K. Bhargava, eds.), Cambridge University Press, 2011.

#### Conference Papers

- [1] J. S. Evans and D. Everitt, "Analysis of reverse link traffic capacity for cellular mobile communication networks employing code division multiple access," in *Proc. Australian Telecommunication Networks and Applications Conference, Melbourne, Australia*, pp. 775–780, Dec. 1994.
- [2] D. Everitt and J. S. Evans, "Traffic variability and effective interference for CDMA cellular networks," in *Proc. ITC Specialists Seminar on Teletraffic Modelling and Measurement, Leidschendam, The Netherlands*, pp. 165–184, Nov. 1995. (Invited Paper).
- [3] J. S. Evans and D. Everitt, "Effective interference: A novel approach for interference modelling and traffic analysis in CDMA cellular networks," in *Proc. IEEE Global Telecommunications Conference*, Singapore, pp. 1804–1808, Nov. 1995.
- [4] J. S. Evans and D. Everitt, "Call admission control in multiple service DS-CDMA cellular networks," in *Proc. IEEE Vehicular Technology Conference*, *Atlanta*, *Georgia*, *USA*, pp. 227–231, Apr. 1996.
- [5] V. Krishnamurthy and J. S. Evans, "Continuous and discrete time filters for Markov jump linear systems with Gaussian observations," in *Proc. IEEE Signal Processing Workshop on Statistical Signal and Array Processing, Corfu, Greece*, pp. 402–405, June 1996.
- [6] J. S. Evans and V. Krishnamurthy, "Finite dimensional filters for random parameter AR models," in *Proc. American Control Conference*, Albuquerque, New Mexico, USA, pp. 2836–2840, June 1997.
- [7] V. Krishnamurthy and J. S. Evans, "Filters for reconstruction of higher order moments," in *Proc. International Conference on Digital Signal Processing, Santorini, Greece*, pp. 153–156, July 1997. (Invited Paper).
- [8] J. S. Evans and R. J. Evans, "State estimation for Markov switching systems with modal observations," in *Proc. IEEE Conference on Decision and Control, San Diego, California, USA*, pp. 1688–1693, Dec. 1997.
- [9] J. S. Evans and V. Krishnamurthy, "Recursive nonlinear estimation of random parameter AR models with Poisson observations," in *Proc. IEEE Conference on Decision and Control, San Diego, California, USA*, pp. 5042–5047, Dec. 1997.
- [10] J. S. Evans and V. Krishnamurthy, "Optimal sensor scheduling for hidden Markov models," in Proc. IEEE International Conference on Acoustics, Speech, and Signal Processing, Seattle, Washington, USA, pp. 2161–2164, May 1998.
- [11] J. S. Evans and R. J. Evans, "A multiple model framework for image-enhanced tracking of maneuvering targets," in *Proc. American Control Conference, Philadelphia, USA*, pp. 2450–2454, June 1998.

- [12] J. S. Evans and V. Krishnamurthy, "Hidden Markov model filtering over a packet switched network," in *Proc. IEEE International Conference on Communications, Atlanta, Georgia, USA*, pp. 1779–1783, June 1998.
- [13] J. S. Evans and D. N. C. Tse, "Linear multiuser receivers for multipath fading channels," in *Proc. IEEE Information Theory Workshop, Kruger National Park, South Africa*, pp. 30–32, June 1999. (Invited Paper).
- [14] J. S. Evans and D. N. C. Tse, "Asymptotic performance analysis of linear multiuser receivers in multipath fading channels," in *Proc. IEEE Global Telecommunications Conference*, *Rio de Janeiro*, *Brazil*, pp. 2411–2416, Dec. 1999.
- [15] L. G. F. Trichard, I. B. Collings, and J. S. Evans, "Parameter selection for multiuser receivers based on iterative methods," in *Proc. IEEE Vehicular Technology Conference, Tokyo, Japan*, pp. 926–930, May 2000.
- [16] J. S. Evans, "Asymptotic analysis of data-aided channel estimation algorithms for synchronous CDMA systems," in *Proc. IEEE International Symposium on Information Theory*, Sorrento, Italy, p. 441, June 2000.
- [17] L. G. F. Trichard, J. S. Evans, and I. B. Collings, "Large system analysis of linear parallel interference cancellation," in *Proc. IEEE International Conference on Communications*, *Helsinki*, *Finland*, pp. 26–30, June 2001.
- [18] S. Marinkovic, B. Vucetic, and J. S. Evans, "Improved iterative parallel interference cancellation for coded CDMA systems," in *Proc. IEEE International Symposium on Information Theory, Washington, D.C., USA*, p. 34, June 2001.
- [19] K.-H. Yap, L. Guan, and J. S. Evans, "Blind adaptive detection for CDMA systems based on regularized independent component analysis," in *Proc. IEEE Global Telecommunications Conference*, San Antonio, Texas, USA, pp. 249–253, Nov. 2001.
- [20] L. G. F. Trichard, J. S. Evans, and I. B. Collings, "Second order iterative CDMA receivers: Performance analysis and parameter optimization," in *Proc. IEEE Global Telecommunications Conference*, San Antonio, Texas, USA, pp. 748–752, Nov. 2001.
- [21] K. Yu, J. S. Evans, and I. B. Collings, "Pilot symbol aided adaptive receiver for Rayleigh faded CDMA channels," in *Proc. IEEE Global Telecommunications Conference*, San Antonio, Texas, USA, pp. 753–757, Nov. 2001.
- [22] L. G. F. Trichard, J. S. Evans, and I. B. Collings, "Optimal linear multistage receivers for synchronous CDMA," in *Proc. IEEE International Conference on Communications, New York City, New York, USA*, pp. 1461–1465, Apr. 2002.
- [23] K. Yu, J. S. Evans, and I. B. Collings, "Performance analysis of pilot symbol aided QAM for Rayleigh fading channels," in *Proc. IEEE International Conference on Communications*, New York City, New York, USA, pp. 1731–1735, Apr. 2002.
- [24] J. S. Evans, "Large system analysis of pilot symbol aided channel estimation in Rayleigh faded CDMA channels," in *Proc. IEEE International Conference on Communications, New York City, New York, USA*, pp. 1903–1907, Apr. 2002.
- [25] L. G. F. Trichard, J. S. Evans, and I. B. Collings, "Optimal linear multistage receivers and the recursive large system SIR," in *Proc. IEEE International Symposium on Information Theory, Lausanne, Switzerland*, p. 21, July 2002.

- [26] J. S. Evans, "Optimal resource allocation for pilot symbol aided multiuser receivers in Rayleigh faded CDMA channels," in *Proc. IEEE International Symposium on Information Theory, Lausanne, Switzerland*, p. 191, July 2002.
- [27] V. Ponnampalam, J. S. Evans, and B. Vucetic, "Reduced complexity decoding algorithms for linear block codes," in *Proc. IEEE International Symposium on Information Theory*, Lausanne, Switzerland, p. 314, July 2002.
- [28] K. Yu, J. S. Evans, and I. B. Collings, "Performance analysis of LMMSE receivers for Mary QAM in Rayleigh faded CDMA channels," in *Proc. Australian Communications Theory Workshop, Melbourne, Australia*, pp. 13–18, Feb. 2003.
- [29] J. Papandriopoulos, J. S. Evans, and S. Dey, "Achieving outage probability specifications through power control and multiuser detection," in *Proc. Australian Communications Theory Workshop, Melbourne, Australia*, pp. 53–60, Feb. 2003. (Winner of Best Student Paper Award).
- [30] J. Papandriopoulos, J. S. Evans, and S. Dey, "Optimal power control in CDMA networks with constraints on outage probability," in *Proc. International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks, Sophia-Antipolis, France*, pp. 279–285, Mar. 2003.
- [31] J. Papandriopoulos, J. S. Evans, and S. Dey, "Iterative power control and multiuser detection with outage probability constraints," in *Proc. IEEE International Conference on Communications, Anchorage, Alaska, USA*, pp. 2509–2513, May 2003.
- [32] L. G. F. Trichard, J. S. Evans, and I. B. Collings, "Optimal linear multistage receivers with unequal power users," in *Proc. IEEE International Symposium on Information Theory*, *Yokohama*, *Japan*, p. 390, July 2003.
- [33] S. Dey and J. S. Evans, "Optimal power control in wireless data networks with outage-based utility guarantees," in *Proc. IEEE Conference on Decision and Control, Maui, Hawaii, USA*, pp. 570–575, Dec. 2003.
- [34] B. L. Ng, J. S. Evans, S. V. Hanly, and A. J. Grant, "Distributed linear multiuser detection in cellular networks," in *Proc. Australian Communications Theory Workshop, Newcastle, Australia*, pp. 127–132, Feb. 2004.
- [35] J. Papandriopoulos, J. S. Evans, and S. Dey, "Distributed power control for cellular MIMO systems with temporal and spatial filtering," in *Proc. Australian Communications Theory Workshop, Newcastle, Australia*, pp. 164–175, Feb. 2004.
- [36] N. Nguyen and J. S. Evans, "Design issues for pilot-assisted communication over Rayleigh fading channels," in *Proc. Australian Communications Theory Workshop*, Newcastle, Australia, pp. 58–65, Feb. 2004.
- [37] A. Grant, S. V. Hanly, J. S. Evans, and R. Müller, "Distributed decoding for Wyner cellular systems," in *Proc. Australian Communications Theory Workshop, Newcastle, Australia*, pp. 77–81, Feb. 2004.
- [38] S. Dey and J. S. Evans, "Optimal power control over multiple time-scale fading channels with service outage constraints," in *Proc. International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks, Cambridge, UK*, pp. 254–263, Mar. 2004.
- [39] B. L. Ng, J. S. Evans, S. V. Hanly, and A. J. Grant, "Information capacity of Wyner's cellular network with LMMSE receivers," in *Proc. IEEE International Conference on Communications, Paris, France*, pp. 583–587, June 2004.

- [40] J. Papandriopoulos, J. S. Evans, and S. Dey, "Outage-based power control for generalized multiuser fading channels," in *Proc. IEEE International Conference on Communications*, *Paris*, *France*, pp. 327–331, June 2004.
- [41] E. Aktas, J. S. Evans, and S. V. Hanly, "Distributed decoding in a cellular multiple-access channel," in *Proc. IEEE International Symposium on Information Theory, Chicago, Illinois, USA*, p. 482, June 2004.
- [42] D. Aktas, M. N. Bacha, J. S. Evans, and S. V. Hanly, "On the sum capacity of multiuser MIMO channels," in *Proc. International Symposium on Information Theory and its Applications, Parma, Italy*, pp. 1013–1018, Oct. 2004.
- [43] B. L. Ng, J. S. Evans, and S. V. Hanly, "Distributed linear multiuser detection in cellular networks based on Kalman smoothing," in *Proc. IEEE Global Telecommunications Conference*, *Dallas, Texas, USA*, pp. 134–138, Nov. 2004.
- [44] W. Chen, R. S. Tucker, J. S. Evans, and W. Shieh, "Optical signal-to-noise ratio monitoring using uncorrelated signal-spontaneous beat noise," in *Proc. Australian Telecommunication Networks and Applications Conference, Sydney, Australia*, pp. 150–155, Dec. 2004.
- [45] J. S. Evans, "MMSE estimators for cellular networks with cooperating base stations," in *Proc. Australian Communications Theory Workshop, Brisbane, Australia*, pp. 246–251, Feb. 2005.
- [46] A. Leong, J. S. Evans, and S. Dey, "Power control and multiuser diversity in multiple access channels with two time scale fading," in *Proc. International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks, Riva del Garda, Trentino, Italy*, pp. 86–95, Apr. 2005.
- [47] B. L. Ng, J. S. Evans, S. V. Hanly, and D. Aktas, "Transmit beamforming with cooperative base stations," in *Proc. IEEE International Symposium on Information Theory, Adelaide, Australia*, pp. 1431–1435, Sept. 2005.
- [48] W. Chen, R. S. Tucker, X. Yi, W. Shieh, and J. S. Evans, "Uncorrelated beat noise measurement for optical signal-to-noise ratio monitoring," in *Proc. European Conference on Optical Communications, Glasgow, Scotland*, pp. 731–732, Sept. 2005.
- [49] M. N. Bacha, J. S. Evans, and S. V. Hanly, "On the capacity of MIMO cellular networks with macrodiversity," in *Proc. Australian Communications Theory Workshop*, *Perth*, *Australia*, pp. 103–107, Feb. 2006.
- [50] L. Chen, B. Krongold, and J. S. Evans, "An adaptive resource allocation algorithm for multiuser OFDM," in *Proc. Australian Communications Theory Workshop, Perth, Australia*, pp. 141–145, Feb. 2006. (Winner of Best Student Paper Award).
- [51] S. Dey and J. S. Evans, "Outage capacity and optimal power allocation for multiple time-scale parallel fading channels," in *Proc. European Wireless Conference*, *Athens*, *Greece*, pp. 1–5, Apr. 2006.
- [52] L. Chen, B. Krongold, and J. S. Evans, "A computationally efficient adaptive resource allocation algorithm for multiuser OFDM," in *Proc. European Wireless Conference*, *Athens*, *Greece*, pp. 1–6, Apr. 2006. (Winner of Best Paper Award).
- [53] E. Aktas, J. S. Evans, and S. V. Hanly, "Distributed base station processing in the uplink of cellular networks," in *Proc. IEEE International Conference on Communications, Istanbul, Turkey*, pp. 1641–1646, June 2006.

- [54] M. N. Bacha, J. S. Evans, and S. V. Hanly, "On the capacity of cellular networks with MIMO links," in *Proc. IEEE International Conference on Communications, Istanbul, Turkey*, pp. 1337–1342, June 2006.
- [55] J. Papandriopoulos, S. Dey, and J. S. Evans, "Distributed cross-layer optimization of MANETs in composite fading," in *Proc. IEEE International Conference on Communica*tions, Istanbul, Turkey, pp. 3270–3275, June 2006.
- [56] J. Papandriopoulos and J. S. Evans, "Low-complexity distributed algorithms for spectrum balancing in multi-user DSL networks," in *Proc. IEEE International Conference on Communications, Istanbul, Turkey*, pp. 3879–3884, June 2006. (Winner of Best Paper Award in Signal Processing for Communications Symposium).
- [57] W. Chen, F. Buchali, X. Yi, W. Shieh, J. S. Evans, and R. S. Tucker, "PMD mitigation at 10 Gbp/s using Viterbi equalizer for DPSK and DQPSK modulation formats," in *Proc. Australian Conference on Optical Fibre Technology, Melbourne, Australia*, pp. 10–12, July 2006.
- [58] W. Chen, F. Buchali, X. Yi, W. Shieh, J. S. Evans, and R. S. Tucker, "Viterbi equalizer for chromatic dispersion and PMD mitigation in DPSK and DQPSK systems at 10 Gb/s," in Proc. European Conference on Optical Communications, Cannes, France, Sept. 2006.
- [59] B. L. Ng, J. S. Evans, S. V. Hanly, and A. J. Grant, "Exploiting macro-diversity in cellular networks using the sum-product algorithm," in *Proc. Australian Communications Theory Workshop*, Adelaide, Australia, pp. 97–103, Feb. 2007.
- [60] A. Leong, S. Dey, and J. S. Evans, "Error exponents for Neyman-Pearson detection of Markov chains in noise," in *Proc. Information*, *Decision and Control*, *Adelaide*, *Australia*, pp. 94–99, Feb. 2007.
- [61] B. L. Ng, J. S. Evans, and S. V. Hanly, "On the capacity of cellular networks with global LMMSE receiver," in *Proc. IEEE International Conference on Communications, Glasgow*, United Kingdom, pp. 870–876, June 2007.
- [62] J. Li, S. Dey, and J. S. Evans, "Maximal lifetime rate and power allocation for sensor networks with data distortion constraints," in *Proc. IEEE International Conference on Communications, Glasgow, United Kingdom*, pp. 3678–3685, June 2007.
- [63] B. L. Ng, J. S. Evans, and S. V. Hanly, "Distributed downlink beamforming in cellular networks," in *Proc. IEEE International Symposium on Information Theory, Nice, France*, pp. 6–10, June 2007.
- [64] J. Papandriopoulos and J. S. Evans, "Band preference design algorithms for improved iterative water-filling," in Proc. IEEE Global Telecommunications Conference, Washington, D.C., USA, pp. 2899–2903, Nov. 2007.
- [65] N. Badruddin, J. S. Evans, and S. Hanly, "Maximising sum rate for two interfering wireless links," in *Proc. Australian Communications Theory Workshop, Christchurch, New Zealand*, pp. 75–81, Jan. 2008.
- [66] F. Li and J. S. Evans, "Design of distributed detection schemes for multiaccess channels," in *Proc. Australian Communications Theory Workshop, Christchurch, New Zealand*, pp. 51–57, Jan. 2008. (Winner of Best Student Paper Award).
- [67] F. Li and J. S. Evans, "Optimal strategies for distributed detection over multiaccess channels," in *Proc. IEEE International Conference on Acoustics, Speech, and Signal Processing, Las Vegas, Nevada, USA*, pp. 2417–2420, Mar. 2008.

- [68] C. R. N. Athaudage, M. Saito, and J. S. Evans, "Performance analysis of dual-hop OFDM relay systems with subcarrier mapping," in *Proc. IEEE International Conference on Communications, Beijing, China*, pp. 4419–4423, May 2008.
- [69] C. R. N. Athaudage, M. Saito, and J. S. Evans, "Capacity of OFDM systems in Nakagamim fading channels: The role of channel frequency selectivity," in *Proc. IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, Cannes, France*, pp. 1–4, Sept. 2008.
- [70] N. Badruddin, S. Bhaskaran, J. S. Evans, and S. Hanly, "Maximizing the sum rate in symmetric networks of interfering links under flat power constraints," in *Proc. Annual Allerton Conference on Communication, Control, and Computing, Monticello, Illinois, USA*, pp. 46–53, Sept. 2008.
- [71] S. Dey, A. Leong, and J. S. Evans, "On Kalman filtering with faded measurements," in *Proc. Annual Allerton Conference on Communication, Control, and Computing, Monticello, Illinois, USA*, pp. 607–614, Sept. 2008.
- [72] F. Li and J. S. Evans, "Decision fusion over noncoherent fading multiaccess channels," in *Proc. IEEE Global Telecommunications Conference, New Orleans, Louisiana, USA*, pp. 1–5, Nov. 2008.
- [73] V. K. Nguyen and J. S. Evans, "Multiuser transmit beamforming via regularized channel inversion: A large system analysis," in *Proc. IEEE Global Telecommunications Conference*, New Orleans, Louisiana, USA, pp. 1–4, Nov. 2008.
- [74] M. Saito, C. R. N. Athaudage, and J. S. Evans, "On power allocation for dual-hop amplify-and-forward OFDM relay systems," in *Proc. IEEE Global Telecommunications Conference*, New Orleans, Louisiana, USA, pp. 1–6, Nov. 2008.
- [75] A. Leong, S. Dey, and J. S. Evans, "Power efficient state estimation using multiple sensors," in Proc. International Symposium on Information Theory and its Applications, Auckland, New Zealand, pp. 924–929, Dec. 2008.
- [76] H. Deng, M. Kuijper, and J. S. Evans, "An improved upperbound for (n,k,m) systematic convolutional codes in burst erasure channels," in *Proc. Australian Communications Theory Workshop, Sydney, Australia*, pp. 33–37, Feb. 2009.
- [77] S. Bhaskaran, S. Hanly, N. Badruddin, and J. S. Evans, "Maximizing the sum rate in symmetric networks of interfering links," in *Proc. Information Theory and Applications Workshop*, San Diego, California, USA, pp. 130–137, Feb. 2009.
- [78] S. Bhaskaran, S. Hanly, N. Badruddin, and J. S. Evans, "Maximizing the sum rate in symmetric networks of interfering links," in *Proc. IEEE International Conference on Communications, Dresden, Germany*, pp. 1–6, June 2009.
- [79] H. Deng, M. Kuijper, and J. S. Evans, "Burst erasure correction capabilities of (n,n-1) convolutional codes," in *Proc. IEEE International Conference on Communications, Dresden, Germany*, pp. 1–5, June 2009.
- [80] L. Chen, B. Krongold, and J. S. Evans, "Performance evaluation of optical OFDM systems with nonlinear clipping distortion," in *Proc. IEEE International Conference on Communications, Dresden, Germany*, pp. 1–5, June 2009.
- [81] L. Chen, B. Krongold, and J. S. Evans, "Diversity combining for asymmetrically clipped optical OFDM in IM/DD channels," in *Proc. IEEE Global Telecommunications Conference*, *Honolulu, Hawaii, USA*, pp. 1–6, Nov. 2009.

- [82] F. Li and J. S. Evans, "A distributed hybrid filter for target tracking in sensor networks," in Proc. IEEE Conference on Decision and Control, Shanghai, China, pp. 7587–7592, Dec. 2009.
- [83] N. Badruddin, S. Hanly, and J. S. Evans, "Optimal binary power allocation for wireless networks with local interference," in *Proc. IEEE International Conference on Communications*, Capetown, South Africa, pp. 1–5, May 2010.
- [84] L. Chen, B. Krongold, and J. S. Evans, "Successive decoding of anti-periodic OFDM signals in IM/DD optical channel," in *Proc. IEEE International Conference on Communications, Capetown, South Africa*, pp. 1–6, May 2010.
- [85] N. Badruddin, J. S. Evans, and S. Hanly, "On optimal power allocation for a class of interference networks," in *Proc. IEEE Global Telecommunications Conference*, *Miami, Florida*, *USA*, pp. 1–5, Dec. 2010.
- [86] R. Muharar and J. S. Evans, "Optimal training for time-division duplexed systems with transmit beamforming," in *Proc. Australian Communications Theory Workshop, Melbourne, Australia*, pp. 158–163, Jan. 2011. (Winner of Best Student Paper Award).
- [87] L. Chen, B. Krongold, and J. S. Evans, "An optimal tone reservation method for IM/DD optical OFDM transmission in multimode fiber," in *Proc. Optical Fiber Communication Conference and Exposition (OFC)*, Los Angeles, CA, USA, pp. 1–3, Mar. 2011.
- [88] H. Inaltekin, T. Samarasinghe, and J. S. Evans, "Rate optimal limited feedback policies for the MIMO downlink," in Proc. International Symposium on Modeling and Optimization in Mobile, Ad Hoc and Wireless Networks, Princeton, New Jersey, USA, pp. 294–299, May 2011.
- [89] A. Limmanee, S. Dey, and J. S. Evans, "Service-outage capacity maximization in cognitive radio," in *Proc. IEEE International Conference on Communications, Kyoto, Japan*, pp. 1–6, June 2011.
- [90] R. Muharar and J. S. Evans, "Downlink beamforming with transmit-side channel correlation: A large system analysis," in *Proc. IEEE International Conference on Communications*, *Kyoto, Japan*, pp. 1–5, June 2011.
- [91] T. Samarasinghe, H. Inaltekin, and J. S. Evans, "The feedback-capacity tradeoff for opportunistic beamforming," in *Proc. IEEE International Conference on Communications, Kyoto, Japan*, pp. 1–6, June 2011.
- [92] T. Samarasinghe, H. Inaltekin, and J. S. Evans, "Vector broadcast channels: Optimality of threshold feedback policies," in *Proc. IEEE International Symposium on Information Theory, Saint Petersburg, Russia*, pp. 1292 –1296, July 2011.
- [93] T. Samarasinghe, H. Inaltekin, and J. S. Evans, "Vector broadcast channels: Optimal threshold selection problem," in *Proc. IEEE International Symposium on Information Theory, Saint Petersburg, Russia*, pp. 1906–1910, July 2011.
- [94] R. Muharar and J. S. Evans, "Optimal power allocation for multiuser transmit beamforming via regularized channel inversion," in *Proc. Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, USA*, pp. 1393–1397, Nov. 2011.
- [95] L. Chen, Y. Ji, B. Krongold, and J. S. Evans, "Linear programming for tone reservation based IM/DD optical OFDM communications," in *Proc. Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, USA*, pp. 1953–1958, Nov. 2011.

- [96] J. Scarlett, J. S. Evans, and S. Dey, "How much training is needed in fading multiple access channels?," in *Proc. IEEE International Symposium on Wireless Communication Systems*, *Aachen, Germany*, pp. 527–531, Nov. 2011.
- [97] R. Muharar, R. Zakhour, and J. S. Evans, "Base station cooperation with noisy analog channel feedback: A large system analysis," in *Proc. IEEE International Conference on Communications*, Ottawa, Canada, pp. 2303–2307, June 2012.
- [98] R. Muharar, R. Zakhour, and J. S. Evans, "Base station cooperation with limited feedback: A large system analysis," in *Proc. IEEE International Symposium on Information Theory*, *Boston, MA, USA*, pp. 1152–1156, July 2012.
- [99] T. Samarasinghe, H. Inaltekin, and J. S. Evans, "Optimal selective feedback policies for opportunistic beamforming under peak feedback constraints," in *Proc. IEEE International* Symposium on Information Theory, Boston, MA, USA, pp. 2919–2923, July 2012.
- [100] M. Wang, F. Li, J. S. Evans, and S. Dey, "Dynamic multi-user MIMO scheduling with limited feedback in LTE-Advanced," in *Proc. IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, Sydney, Australia*, pp. 1627–1632, Sept. 2012.
- [101] R. Senanayake, P. L. Yeoh, and J. S. Evans, "Optimal multiuser detection in a cooperative two-cell network," in *Proc. Australian Communications Theory Workshop, Adelaide, Australia*, pp. 1–6, Jan. 2013. (Winner of Best Student Paper Award).
- [102] T. Samarasinghe, H. Inaltekin, and J. S. Evans, "Optimal SNR-based coverage in Poisson cellular networks with power density constraints," in *Proc. Australian Communications Theory Workshop*, Adelaide, Australia, pp. 105–110, Jan. 2013.
- [103] M. Wang, F. Li, and J. S. Evans, "Modified semi-orthogonal user scheduling scheme with optimized user selection parameter," in *Proc. Australian Communications Theory Workshop*, *Adelaide*, *Australia*, pp. 111–115, Jan. 2013.
- [104] N. Ramanathan, F. Li, M. Kuijper, and J. S. Evans, "Performance of multi-mode transmission with finite rate feedback in MIMO broadcast systems," in *Proc. Australian Communications Theory Workshop*, Adelaide, Australia, pp. 140–145, Jan. 2013.
- [105] M. Wang, F. Li, and J. S. Evans, "Opportunistic beamforming with precoder diversity in multi-user MIMO systems," in *Proc. IEEE Vehicular Technology Conference, Dresden, Ger*many, pp. 1–5, June 2013. (Winner of Best Paper in Multiple Antenna Systems and Space-Time-Frequency Processing Track).
- [106] R. Senanayake, P. L. Yeoh, and J. S. Evans, "Error probability bounds for multiuser detection in cooperative cellular networks," in *Proc. IEEE Vehicular Technology Conference*, *Las Vegas*, *Nevada*, *USA*, pp. 1–5, Sept. 2013.
- [107] T. Samarasinghe, H. Inaltekin, and J. S. Evans, "Optimal SINR-based coverage in Poisson cellular networks with power density constraints," in *Proc. IEEE Vehicular Technology Conference, Las Vegas, Nevada, USA*, pp. 1–5, Sept. 2013.
- [108] R. Senanayake, P. L. Yeoh, and J. S. Evans, "On the bit error probability for interference limited cooperative networks," in *Proc. Australasian Telecommunication Networks and Ap*plications Conference, Christchurch, New Zealand, pp. 83–88, Nov. 2013.
- [109] Y. Hu, Y. Hong, and J. S. Evans, "Spatial blocking in Poisson cellular networks with random channel reuse," in *Proc. Australasian Telecommunication Networks and Applications Conference, Christchurch, New Zealand*, pp. 95–99, Nov. 2013.

- [110] J. Liang, F. Li, B. Krongold, and J. S. Evans, "Transmission mode selection in a heterogeneous network using opportunistic beamforming," in *Proc. IEEE Global Telecommunications Conference*, Atlanta, Georgia, USA, pp. 3802–3808, Dec. 2013.
- [111] T. Samarasinghe, H. Inaltekin, and J. S. Evans, "Outage capacity of opportunistic beamforming with random user locations," in *Proc. IEEE Global Telecommunications Conference*, *Atlanta, Georgia, USA*, pp. 1944–1949, Dec. 2013.
- [112] M. Wang, T. Samarasinghe, and J. S. Evans, "Multi-cell opportunistic beamforming in interference-limited networks," in *Proc. Australian Communications Theory Workshop, Sydney, Australia*, pp. 126–131, Feb. 2014. (Winner of Best Student Paper Award).
- [113] T. Samarasinghe, H. Inaltekin, and J. S. Evans, "Maximizing the coverage-intensity product in random cellular networks," in *Proc. Australian Communications Theory Workshop*, Sydney, Australia, pp. 73–78, Feb. 2014.
- [114] Y. Y. He, J. S. Evans, and S. Dey, "Secrecy rate maximization for cooperative overlay cognitive radio networks with artificial noise," in *Proc. IEEE International Conference on Communications*, Sydney, Australia, pp. 1663–1668, June 2014.
- [115] Y. Hu, Y. Hong, and J. S. Evans, "Uplink coverage and spatial blocking in Poisson cellular networks," in *Proc. IEEE International Conference on Communications, Sydney, Australia*, pp. 5765–5770, June 2014.
- [116] M. Wang, T. Samarasinghe, and J. S. Evans, "Transmission rank selection for opportunistic beamforming with quality of service constraints," in *Proc. IEEE International Conference on Communications, Sydney, Australia*, pp. 1904–1909, June 2014.
- [117] R. Senanayake, P. L. Yeoh, and J. S. Evans, "Error probability bounds for interference-limited cooperative networks," in *Proc. IEEE International Conference on Communications, Sydney, Australia*, pp. 4747–4752, June 2014.
- [118] D. Kudavithana, Q. Chaudhari, B. Krongold, and J. S. Evans, "On the energy efficiency of coherent communication in multipath fading channels," in *Proc. IEEE Global Telecommunications Conference, Workshop on Green Broadband access: energy efficient wireless and wired network solutions, Austin, Texas, USA*, pp. 1087–1093, Dec. 2014.
- [119] R. Senanayake, P. L. Yeoh, and J. S. Evans, "On the sum capacity of cluster-based cooperative cellular networks," in *Proc. IEEE International Conference on Communications, London, United Kingdom*, pp. 1613–1618, June 2015.
- [120] R. Senanayake, P. L. Yeoh, and J. S. Evans, "Distributed LMMSE estimation in cooperative cellular networks," in *Proc. IEEE International Conference on Communications, London, United Kingdom*, pp. 4083–4088, June 2015.
- [121] S. Atapattu, H. Jiang, J. S. Evans, and C. Tellambura, "Time-switching energy harvesting in relay networks," in *Proc. IEEE International Conference on Communications, London, United Kingdom*, pp. 5416–5421, June 2015.
- [122] Y. Hu, Y. Hong, and J. S. Evans, "Interference in LoS massive MIMO is well approximated by a Beta-mixture," in *Proc. IEEE International Conference on Communications, Workshop on 5G and Beyond Enabling Technologies and Applications, London, United Kingdom*, pp. 1137–1142, June 2015.
- [123] S. Atapattu and J. Evans, "Optimal power-splitting ratio for wireless energy harvesting in relay networks," in *Proc. IEEE Vehicular Technology Conference*, *Boston*, *MA*, *USA*, pp. 1–6, Sept. 2015.

- [124] B. Pilanawithana, S. Atapattu, and J. S. Evans, "Distribution of number of users per cell in shadowing," in *Proc. Australian Communications Theory Workshop, Melbourne, Australia*, pp. 153–156, Jan. 2016.
- [125] A. Thudugalage, S. Atapattu, and J. S. Evans, "Beamforming for total energy maximization in MISO networks," in *Proc. Australian Communications Theory Workshop, Melbourne*, *Australia*, pp. 112–117, Jan. 2016.
- [126] Y. Hu, Y. Hong, and J. S. Evans, "SIR coverage in an uplink Poisson cellular network with LoS massive MIMO," in *Proc. Australian Communications Theory Workshop, Melbourne, Australia*, pp. 187–192, Jan. 2016.
- [127] A. Thudugalage, S. Atapattu, and J. S. Evans, "Beamformer design for wireless energy transfer with fairness," in *Proc. IEEE International Conference on Communications, Kuala Lumpur, Malaysia*, pp. 1–6, May 2016.
- [128] Y. Hu, Y. Hong, and J. S. Evans, "Modelling interference in high altitude platforms with 3D LoS massive MIMO," in *Proc. IEEE International Conference on Communications, Kuala Lumpur, Malaysia*, pp. 1–6, May 2016.
- [129] Y. Sarikaya, H. Inaltekin, T. Alpcan, and J. S. Evans, "Interference scaling in multi-cell network with rate guarantees," in *Proc. International Conference on Digital Information and Communication Technology and its Applications, Konya, Turkey*, pp. 12–17, July 2016.
- [130] R. Senanayake, A. Lozano, P. Smith, and J. S. Evans, "Analytical handle for ZF reception in distributed massive MIMO," in *Proc. Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, USA*, pp. 16–20, Nov. 2016.
- [131] A. Sivamalai and J. S. Evans, "On uplink user capacity for massive MIMO cellular networks," in *Proc. IEEE Global Telecommunications Conference, Washington, DC, USA*, pp. 1–7, Dec. 2016.
- [132] D. Kudavithana, Q. Chaudhari, J. S. Evans, and B. Krongold, "Energy modeling and optimization of cooperative dual-relay systems," in *Proc. IEEE Global Telecommunications Conference*, Washington, DC, USA, pp. 1–7, Dec. 2016.
- [133] R. Senanayake, P. L. Yeoh, and J. S. Evans, "Symbol error probability of cluster-based cooperative cellular networks," in *Proc. IEEE Global Telecommunications Conference, Washington*, *DC*, *USA*, pp. 1–6, Dec. 2016.
- [134] D. Kudavithana, Q. Chaudhari, J. S. Evans, and B. Krongold, "Energy modelling and optimization of amplify-and-forward relay transmission," in *Proc.IEEE Wireless Communications and Networking Conference, Workshop on Green and Sustainable 5G Wireless Networks, San Francisco, CA, USA*, pp. 1–6, Mar. 2017.
- [135] R. Senanayake, S. Atapattu, P. L. Yeoh, and J. S. Evans, "Decentralized relay selection in twouser multihop decode-and-forward relay networks," in *Proc. IEEE International Conference* on Communications, Paris, France, pp. 1–6, May 2017.
- [136] S. Atapattu, P. Dharmawansa, M. Di Renzo, and J. S. Evans, "Relay selection in full-duplex multiple-user wireless networks," in *Proc. IEEE Global Telecommunications Conference, Singapore*, pp. 1–6, Dec. 2017.
- [137] B. Pilanawithana, S. Atapattu, and J. S. Evans, "Energy allocation and energy harvesting in wireless relay networks with hybrid protocol," in *Proc. IEEE Global Telecommunications Conference*, Singapore, pp. 1–6, Dec. 2017.

- [138] S. Atapattu, Y. He, P. Dharmawansa, and J. S. Evans, "Impact of residual self-interference and direct-link interference on full-duplex relays," in *Proc. IEEE International Conference on Industrial and Information Systems (ICIIS)*, *Peradeniya*, Sri Lanka, pp. 1–6, Dec. 2017.
- [139] S. Gayan, R. Senanayake, and J. S. Evans, "On the symbol error probability for QPSK with quantized observations," in *Proc. International Telecommunication Networks and Applications Conference, Melbourne, Australia*, pp. 1–6, Nov. 2017.
- [140] R. Senanayake, P. Smith, and J. S. Evans, "Order-statistics based analysis of distributed antenna systems with limited RF chains," in *Proc. IEEE Wireless Communications and Networking Conference, Barcelona, Spain*, pp. 1–6, Apr. 2018.
- [141] R. Senanayake, P. Smith, P. Dmochowski, and J. S. Evans, "Novel distributed spectrum sensing techniques for cognitive radio networks," in *Proc. IEEE Wireless Communications and Networking Conference, Barcelona, Spain*, pp. 1–6, Apr. 2018.
- [142] R. Muharar and J. S. Evans, "Performance analysis of massive MIMO networks with random unitary pilot matrices," in *Proc. IEEE Wireless Communications and Networking Conference*, Barcelona, Spain, pp. 1–6, Apr. 2018.
- [143] T. N. Cao, N. Zlatanov, P. L. Yeoh, and J. S. Evans, "Optimal detection interval for absorbing receivers in molecular communication systems with interference," in *Proc. IEEE International Conference on Communications, Kansas City, Missouri, USA*, pp. 1–6, May 2018.
- [144] Y. He, S. Atapattu, J. S. Evans, and C. Tellambura, "A novel and tractable antenna selection in spatial modulation systems," in *Proc. IEEE International Conference on Communications*, Kansas City, Missouri, USA, pp. 1–6, May 2018.
- [145] S. Atapattu, N. Ross, Y. Jing, Y. He, and J. S. Evans, "Physical-layer security in full-duplex multi-user relay networks," in *Proc. IEEE International Conference on Communications*, Kansas City, Missouri, USA, pp. 1–6, May 2018.
- [146] B. Pilanawithana, S. Atapattu, and J. S. Evans, "Average transmission success probability bound for SWIPT relay networks," in *Proc. IEEE Wireless Communications and Networking Conference, Marrakech, Morocco*, pp. 1–6, Apr. 2019.
- [147] A. Thudugalage, S. Atapattu, and J. S. Evans, "Opportunistic wireless energy transfer in point-to-point links," in *Proc. IEEE Wireless Communications and Networking Conference*, Marrakech, Morocco, pp. 1–6, Apr. 2019.
- [148] S. Gayan, H. Inaltekin, R. Senanayake, and J. S. Evans, "Phase modulated communication with low-resolution ADCs," in *Proc. IEEE International Conference on Communications*, Shanghai, China, pp. 1–7, May 2019.
- [149] S. Atapattu, H. Inaltekin, and J. S. Evans, "Location-based optimum relay selection in random spatial networks," in *Proc. IEEE International Conference on Communications, Shanghai, China*, pp. 1–6, May 2019.
- [150] T. N. Cao, A. Ahmadzadeh, V. Jamali, W. Wicke, P. L. Yeoh, J. S. Evans, and R. Schober, "Diffusive mobile MC for controlled-release drug delivery with absorbing receiver," in *Proc. IEEE International Conference on Communications, Shanghai, China*, pp. 1–7, May 2019.
- [151] G. Zafzouf, G. Nair, and J. S. Evans, "'zero-error capacity of multiple access channels via nonstochastic information," in *Proc. IEEE Information Theory Workshop, Visby, Gotland, Sweden*, pp. 1–5, Aug. 2019.

- [152] B. Pilanawithana, S. Atapattu, and J. S. Evans, "Resource allocation in dynamic DF relay for SWIPT network with circuit power consumption," in *Proc. IEEE Global Telecommunications Conference, Waikoloa, Hawaii, USA*, pp. 1–6, Dec. 2019.
- [153] H. Inaltekin, S. Atapattu, and J. S. Evans, "Limited-feedback distributed relay selection for random spatial wireless networks," in *Proc. IEEE Global Telecommunications Conference*, Waikoloa, Hawaii, USA, pp. 1–6, Dec. 2019.
- [154] T. N. Cao, V. Jamali, W. Wicke, P. L. Yeoh, N. Zlatanov, J. S. Evans, and R. Schober, "Chemical reactions-based detection mechanism for molecular communications," in *Proc. IEEE Wireless Communications and Networking Conference, Seoul, Korea*, Apr. 2020.
- [155] S. Dayarathna, R. Senanayake, and J. S. Evans, "Binary power optimality for two link full-duplex network," in *Proc. IEEE Wireless Communications and Networking Conference, Seoul, Korea*, Apr. 2020.
- [156] S. Dayarathna, M. Razlighi, R. Senanayake, N. Zlatanov, and J. S. Evans, "Centralized scheduling with sum-rate optimization in flexible half-duplex networks," in *Proc. IEEE Wireless Communications and Networking Conference, Seoul, Korea*, Apr. 2020.
- [157] S. Atapattu, C. Weeraddana, M. Ding, H. Inaltekin, and J. S. Evans, "Latency minimization with optimum workload distribution and power control for fog computing," in *Proc. IEEE Wireless Communications and Networking Conference, Seoul, Korea*, Apr. 2020.
- [158] S. Atapattu, R. Fan, P. Dharmawansa, G. Wang, and J. S. Evans, "Two-way communications via reconfigurable intelligent surface," in *Proc. IEEE Wireless Communications and Networking Conference, Seoul, Korea*, Apr. 2020.

## **Engineering Education Papers**

- [1] G. Buskes, B. Shen, J. S. Evans, and A. Ooi, "Using active teaching workshops to enhance the lecture experience," in *Proc. Annual Conference of the Australasian Association for Engineering Education, Adelaide, Australia*, pp. 67–72, Dec. 2009.
- [2] B. Shen, G. Buskes, J. S. Evans, and A. Ooi, "Teacher- versus student-centered approaches to online assessment: experiences in a first year engineering subject," in *Proc. Annual Conference of the Australasian Association for Engineering Education, Sydney, Australia*, pp. 334–339, Dec. 2010.
- [3] B. Shen, G. Buskes, J. S. Evans, and A. Ooi, "Diversity and longevity: a framework for graduate attribute development in engineering education," in *Proc. Annual Conference of the Australian Association for Engineering Education, Fremantle, Australia*, pp. 382–388, Dec. 2011.
- [4] N. R. Sherburn, S. Y. Ng, J. S. Evans, and J. Li, "The MeLTS audience response system: Student reception, benefits and usage," in *Proc. Annual Conference of the Australasian Association for Engineering Education, Wellington, New Zealand*, pp. 1–9, Dec. 2014.