

**List of WINLAB Publications and Talks on Radio Resource Management  
(2004 to Spring 2007)  
(Listed in alphabetical order by principal author)**

Author	Co-Authors	Paper/Talk	Title	Where/When
Acharya, J.	Yates, R.D.	Conference Paper	A Framework for Dynamic Spectrum Sharing between Cognitive Radios	To appear in the Proceedings of IEEE International Conference on Communications (ICC 2007), Glasgow, Scotland, June 2007.
Acharya, J.	Yates, R.D.	Conference Paper	Profit Maximizing Pricing Strategies for Dynamic Spectrum Allocation	Proceedings of IEEE Conference on Information Sciences and Systems, Baltimore, MD, March 2007.
Acharya, J.	Roy, R., Singh, J. and C. Rose	Conference Paper	Optimal Signature Sets for Transmission of Correlated Data over a Multiple Access Channel	Proceedings of the 47th IEEE Global Telecommunications Conference (GLOBECOM '04), Dallas, TX, December 2004, pp.1046-1050.
Atay, F.	Rose, C.	Conference Paper	Threshold-Based Policies for Mobile Infostations	Proceedings of Conference on Information Sciences and Systems (CISS '04), Princeton, NJ, March 2004.
Atay, F.	Rose, C.	Conference Paper	Exploiting Mobility in Multi-hop Infostation Networks to Decrease Transmit Power	Proceedings of IEEE Wireless Communications and Networks Conference (WCNC 2004), Atlanta, GA, March 2004, pp. 2353-2358.
Bohacek, S.	Blum, R., Cimini, L., Greenstein, L., and Haimovich	Conference Paper	The Impact of the Timeliness of Information on the Performance of Multihop Best-Select	Proceedings of MILCOM 2005, Atlantic City, NJ, October 2005, pp. 1-7.
Clemens, N.	Rose, C.	Conference Paper	Intelligent Power Allocation Strategies in an Unlicensed Spectrum	Proceedings of IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks (DySPAN '05), Baltimore, MD, November 2005, pp. 37-42.
Feng, N.	Mau, S-C. and Mandayam, N.B.	Journal Paper	Pricing and Power Control for Joint Network-Centric and User-Centric Radio Resource Management	IEEE Transactions on Communications, Vol. 52, No. 9, pp. 1547-1557, September 2004.
Gopal, S.	Paul, S. and Raychaudhuri, D.	Conference Paper	Investigation of the TCP Simultaneous-Send Problem in 802.11 Wireless Local Area Networks	Proceedings of the IEEE International Conference on Communications, Seoul, Korea, May 2005, pp. 3594-3598.
Gopal, S.	Ramaswamy, K. and Wang, C.	Conference Paper	On Video Multicast over Wireless LANs	Proceedings of the IEEE Conference on Multimedia and Expo (ICME '04), Taipei, Taiwan, June 2004, pp. 1063-1066.
Jing, X.	Raychaudhuri, D.	Conference Paper	Global Control Plane Architecture for Cognitive Radio Networks	To appear in Proceedings of IEEE CogNet 2007 Workshop – Towards Cognition in Wireless Networks (in conjunction with IEEE International Conference on Communications – ICC 2007), Glasgow, Scotland, June 2007.
Jing, X.	Raychaudhuri, D.	Journal Paper	Spectrum Co-Existence of IEEE 802.11b and 802.16a Networks Using Reactive and Proactive Etiquette Policies	ACM Monet Special Issue on Soft Radio-enabled Heterogeneous Wireless Networks, Vol. 11, No. 4, pp. 539-554, August 2006.
Jing, X.	Raychaudhuri, D.	Conference Paper	Spectrum Co-existence of IEEE 802.11b and 802.16a Networks Using the CSCC Etiquette Protocol	Proceedings of IEEE International Symposium on New Frontiers in Dynamic Spectrum Access Networks (DySPAN 2005) Baltimore, MD, November 2005, pp. 243-250.
Jing, X.	Mau, S-C., Raychaudhuri, D. and Matyas, R.	Conference Paper	Reactive Cognitive Radio Algorithms for Co-existence between IEEE 802.11b and 802.16a Networks	Proceedings of the 48 <sup>th</sup> Annual IEEE Global Telecommunications Conference (GLOBECOM 2005) St. Louis, MO, November 2005, pp. 2465-2469.

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Author	Co-Authors	Paper/Talk	Title	Where/When
Kang, J.	Zhang, Y. and Nath, B.	Journal Paper	TARA: Topology-Aware Resource Adaptation to Alleviate Congestion in Sensor Networks	To appear in IEEE Transactions on Parallel and Distributed Systems, 2006.
Kang, J.	Zhang, Y. and Nath, B.	Conference Paper	Analysis of Resource Increase and Decrease Algorithm in Wireless Sensor Networks	Proceedings of IEEE Symposium on Computers and Communications (ISCC), Sardinia, Italy, June 2006, pp. 585-590.
Kang, J.	Zhang, Y. and Nath, B.	Conference Paper	Accurate and Energy-Efficient Congestion Level Measurement in Ad Hoc Networks	Proceedings of the IEEE Wireless Communications and Networking Conference (WCNC 2005), New Orleans, LA, March 2005, pp. 2258-2263.
Kang, J.	Zhang, Y., Nath, B. and Yu, S.	Conference Paper	Adaptive Resource Control Scheme to Alleviate Congestion in Sensor Networks	Proceedings of the First Workshop on Broadband Advanced Sensor Networks (BASENETS) co-sponsored by IEEE Communications Society, San Jose, CA, October 2004.
Karakayali, K.	Yates, R. D. and Razoumov, L.	Journal Paper	Downlink Throughput Maximization in CDMA Wireless Networks	IEEE Transactions on Wireless Communications, Vol. 5, No.12, pp. 3492-3500, December 2006.
Karakayali, K.	Foschini, G.J., Valenzuela, R.A. and Yates, R.D.	Conference Paper	On the Maximum Common Rate Achievable in a Coordinated Network	Proceedings of IEEE International Conference on Communications, Istanbul, Turkey, June 2006, pp.4333-4338.
Karakayali, K.	Foschini, G.J. and Valenzuela, R.A.	Invited Article	Network Coordination for Spectrally Efficient Communications in Cellular Systems	To appear in IEEE Wireless Communications Magazine.
Koskie, S.	Gajic, Z.	Journal Paper	A Nash Game Algorithm for SIR-based Power Control in 3G Wireless CDMA Networks	IEEE/ACM Transactions on Networking, Vol. 13, No. 5, pp. 1017-1026, October 2005.
Krishnan, P.	Krishnakumar, A.S., Ju, W-H., Mallows, C. and Ganu, S.	Conference Paper	A System for LEASE: System for Location Estimation Assisted by Stationary Emitters for Indoor RF Wireless Networks	Proceedings of IEEE Infocom 2004, Hong Kong, March 7-11, 2004, pp. 1001-1010.
Li, X.	Martin, R.P.	Conference Paper	A Simple Ray-Sector Signal Strength Model for Indoor 802.11 Networks	Proceedings of the 2nd IEEE International Conference on Mobile Ad-Hoc and Sensor Systems (MASS 2005), Washington, DC, November 2005, pp.639-648.
Luo, J.	Blum, R., Cimini, L.J., Greenstein, L.J. and Haimovich, A.M.	Journal Paper	Power Allocation in a Transmit Diversity System with Mean Channel Gain Information	IEEE Communication Letters, Vol. 9, No. 7, pp. 616-618, July 2005.
Luo, J.	Blum, R., Cimini, L.J., Greenstein, L.J. and Haimovich, A.M.	Conference Paper	Link Failure Probabilities for Practical Cooperative Relay Networks	Proceedings of the IEEE Vehicular Technology Conference (VTC'05-Spring), Stockholm, Sweden, May 2005, pp. 1489-1493.
Luo, J.	Blum, R., Cimini, L.J., Greenstein, L.J. and Haimovich, A.M.	Conference Paper	New Approaches for Cooperative Use of Multiple Antennas in Ad Hoc Wireless Networks	Proceedings of the IEEE Vehicular Technology Conference (VTC '04-Fall), Los Angeles, CA, September 2004, pp. 2769-2773.
Maric, I.	Yates, R.D. and Kramer, G.	Conference Paper	The Strong Interference Channel with Unidirectional Cooperation	Proceedings of the Inaugural Workshop for Information Theory and Applications (ITA), San Diego, CA, February 2006.
Maric, I.	Yates, R.D. and Kramer, G.	Conference Paper	The Discrete Memoryless Compound Multiple Access Channel with Conferencing Encoders	Proceedings of the IEEE International Symposium on Information Theory (ISIT '05), Adelaide, Australia, September 2005, pp. 407-410.

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Author	Co-Authors	Paper/Talk	Title	Where/When
Maric, I.	Yates, R.D. and Kramer, G.	Conference Paper	The Strong Interference Channel with Common Information	Proceedings of the 43 <sup>rd</sup> Annual Allerton Conference on Communications, Control and Computing, Monticello, IL, September 2005.
Maric, I.	Yates, R.D.	Journal Paper	Cooperative Multicast for Maximum Network Lifetime	Journal on Selected Areas in Communications (JSAC) Special Issue on Wireless Ad Hoc Networks, Vol.23, No. 1, pp.127-135, January 2005.
Maric, I.	Yates, R.D.	Conference Paper	Bandwidth and Power Allocation for Cooperative Strategies in Gaussian Relay Networks	Proceedings of the Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, November 2004, pp. 1907–1911.
Maric, I.	Yates, R.D.	Conference Paper	Static and Dynamic Cooperative Multicast for Maximum Network Lifetime	Proceedings of the 42nd Annual Allerton Conference on Communications, Control and Computing, Monticello, IL, September 2004.
Maric, I.	Yates, R.D.	Journal Paper	Cooperative Multihop Broadcast for Wireless Networks	Journal on Selected Areas in Communications (JSAC) Special Issue on Fundamental Performance Limits of Wireless Sensor Networks, Vol. 22, No.6, pp. 1080-1088, August 2004.
Maric, I.	Yates, R.D.	Conference Paper	Forwarding Strategies for Gaussian Parallel-Relay Networks	Proceedings of the IEEE International Symposium on Information Theory (ISIT '04), Chicago, IL, June 2004, pg. 269.
Maric, I.	Yates, R.D.	Invited Paper	Cooperative Broadcast for Maximum Network Lifetime	Proceedings of the Conference on Information Sciences and Systems (CISS '04), Princeton, NJ, March 2004.
Maric, I.	Yates, R.D.	Conference Paper	Forwarding Strategies for Gaussian Parallel-Relay Networks	Proceedings of the Conference on Information Sciences and Systems (CISS '04), Princeton, NJ, March 2004.
Mathur, S.	Sankaranarayanan, L. and Mandayam, N.B.	Conference Paper	Coalitional Games in Cooperative Radio Networks	Proceedings of the 40 <sup>th</sup> Annual Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, November 2006, pp. 1927-1931.
Mathur, S.	Sankaranarayanan, L. and Mandayam, N.B.	Conference Paper	Coalitional Games in Gaussian Interference Channels	Proceedings of the International Symposium on Information Theory, Seattle, WA, July 2006.
Mathur, S.	Sankaranarayanan, L. and Mandayam, N.B.	Conference Paper	Coalitional Games in Receiver Cooperation for Spectrum Sharing	Proceedings of the Conference on Information Sciences and Systems (CISS '06), Princeton, NJ March 2006.
Ng, C.T.K.	Maric, I., Goldsmith, A.J., Shamai, S. and Yates, R.D.	Conference Paper	Iterative and One-Shot Conferencing in Relay Channels	Proceedings of the IEEE Information Theory Workshop (ITW), Punta del Este, Uruguay, March 2006.
Popescu, D.C.	Popescu, O. and Rose, C.	Journal Paper	Interference Avoidance and Multiaccess Vector Channels	To appear in IEEE Transactions on Communications
Popescu, D.C.	Popescu, O. and Rose, C.	Conference Paper	Interference Avoidance Versus Iterative Water Filling in Multiaccess Vector Channels	Proceedings of the IEEE Vehicular Technology Conference (VTC '04-Fall), Los Angeles, CA, September 2004, pp. 2058-2062.
Popescu, O.	Popescu, D. and Rose, C.	Journal Paper	Simultaneous Water Filling in Mutually Interfering Systems	IEEE Transactions on Wireless Communications, Vol. 6, No. 3, pp. 1102-1113, March 2007.

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Author	Co-Authors	Paper/Talk	Title	Where/When
Popescu, O.	Popescu, D. and Rose, C.	Conference Paper	Interference Avoidance for Capacity Optimization in Mutually Interfering Wireless Systems	Proceedings of the 62 <sup>nd</sup> IEEE Vehicular Technology Conference (VTC 2005 Fall), Dallas, TX, September 2005, pp. 593-597.
Popescu, O.	Popescu, D. and Rose, C.	Conference Paper	Greedy Interference Avoidance in Non-Collaborative Multi-Base Wireless Systems	Proceedings of the 39 <sup>th</sup> Conference on Information Sciences and Systems (CISS 2005) Baltimore, MD, March 2005.
Popescu, O.	Rose, C.	Journal Paper	Greedy SINR Maximization in Collaborative Multi-Base Wireless Systems	EURASIP Journal on Wireless Communications and Networking, Vol. 2004, No. 2, pp.201-209, December 2004.
Popescu, O.	Rose, C. and Popescu, D.	Conference Paper	Signal Space Partitioning Versus Simultaneous Water Filling for Mutually Interfering Systems	Proceedings of the IEEE Global Telecommunications Conference (GLOBECOM '04), Dallas, TX, December 2004, pp. 3128-3132.
Popescu, O.	Rose, C.	Journal Paper	Sum Capacity and TSC Bounds in Collaborative Multibase Wireless Systems	IEEE Transactions on Information Theory, Vol. 50, No. 1, pp. 2433-2438, October 2004.
Popescu, O.	Rose, C. and Popescu, D.	Book Chapter	Maximizing the Determinant for a Special Class of Block-Partitioned Matrices	Mathematical Problems in Engineering, Vol. 2004, No. 1, pp. 49-61, May 2004.
Popescu, O.	Rose, C. and Popescu, D.	Conference Paper	Strong Interference and Spectrum Warfare	Proceedings of the 38th Conference on Information Sciences and Systems (CISS '04), Princeton, NJ, March 2004.
Qian, L.	Gajic, Z.	Journal Paper	Variance Minimization Stochastic Power Control in CDMA Networks	IEEE Transactions on Wireless Communications, Vol. 5, No.1, pp.193-202, January 2006.
Rajappan, G.	Acharya, J., Liu, H., Mandayam, N., Seskar, I. and Yates, R.	Conference Paper	Mobile Infostation Network Technology	Proceedings of the Wireless Sensing and Processing Symposium (part of the SPIE Defense and Security Symposium), Kissimmee, FL, April 2006.
Raman, C.	Yates, R.D. and Mandayam, N.B.	Invited Paper	Cross-Layer Scheduling of End-to-End Flows Using a Spectrum Server	Proceedings of the Conference on Information Sciences and Systems (CISS 2006), Princeton, NJ, March 2006.
Raman, C.	Yates, R.D., Mandayam, N.B.	Conference Paper	Scheduling Variable Rate Links via a Spectrum Server	Proceedings of the IEEE Symposium on New Frontiers in Dynamic Spectrum Access Networks (DySPAN 2005), Baltimore, MD, November 2005, pp. 110-118.
Raychaudhuri, D.		Invited Talk	Research on Spectrum Technology and Policy: An Interim Report Rutgers/Cornell/Michigan State	CSTB Spectrum Management Policy Forum, Washington DC, February 12-13, 2004.
Rose, C.		Invited Talk	Finding the Profound Amid the Mundane: Communications Theory as a Window on the Physical World	iCORE Summit 2006, Banff, May 23, 2006
Rose, C.		Invited Talk	If ET Writes, What Might We Look For?	Conference on Space Archaeology, British Interplanetary Society, May 10, 2006, London, UK
Rose, C.	Wright, G.	Conference Paper	Will ET Write or Radiate: Inscribed Mass vs. 2:20PM Electromagnetic Channels	Proceedings of the Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, CA, November 2004, pp. 203-207.
Rose, C.	Wright, G.	Journal Paper	Inscribed Matter as an Energy-Efficient Means of Communication with an Extraterrestrial Civilization	Nature Magazine, Volume 431, pp. 47-49, September 2, 2004.

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Rose, C.	Popescu, D.	Book	Interference Avoidance Methods for Wireless Systems	Series: Information Technology: Transmission, Processing and Storage, Kluwer, 2004. <a href="http://www.springeronline.com/sga/cda/frontpage/0,11855,5-40109-22-33348025-0,00.html">http://www.springeronline.com/sga/cda/frontpage/0,11855,5-40109-22-33348025-0,00.html</a>
Sankaranarayanan, L.	Kramer, G. and Mandayam, N.	Conference Paper	Cooperation vs. Hierarchy: An Information-theoretic Comparison	Proceedings of the International Symposium on Information Theory, Adelaide, Australia, September 2005, pp. 411-415.
Sankaranarayanan, L.	Kramer, G. and Mandayam, N.	Conference Paper	Cooperative Diversity in Wireless Networks: A Geometry-inclusive Analysis	Proceedings of the 43 <sup>rd</sup> Annual Allerton Conference on Communications, Control and Computing, Allerton, IL, September 2005.
Sankaranarayanan, L.	Kramer, G. and Mandayam, N.	Conference Paper (Invited)	Hierarchical Sensor Networks: Capacity Theorems and Cooperative Strategies Using the Multiple Access Relay Channel Model	Proceedings of the 38th Annual Asilomar Conference on Signals, Systems and Computers, Pacific Grove, CA, November 2004, pp. 1912-1916.
Sankaranarayanan, L.	Kramer, G. and Mandayam, N.	Conference Paper	Hierarchical Sensor Networks: Capacity Theorems and Cooperative Strategies Using the Multiple Access Relay Channel Model	Proceedings of the 1st Annual IEEE Sensor Conference (SECON), Santa Clara, CA, October 2004, pp. 191-199.
Sankaranarayanan, L.	Kramer, G. and Mandayam, N.	Conference Paper	Capacity Theorems for the Multiple-Access Relay Channel	Proceedings of the 42nd Annual Allerton Conference on Communication, Control and Computing, Monticello, IL, October 2004.
Singh, J.	Raman, C., Yates, R.D. and Mandayam, N.	Conference Paper	Random Access for Variable Rate Links	Proceedings of the Military Communications Conference, Washington, DC, October 2006, pp. 1-6.
Singh, J.	Rose, C.	Conference Paper	Channel Probing Under a Power Budget	Proceedings of the Conference on Information Sciences and Systems (CISS '06), Princeton, NJ, March 2006, pp. 487-491.
Ulukus, S.	Yates, R.	Journal Paper	User Capacity of Asynchronous CDMA Systems with Matched Filter Receivers and Optimum Signature Sequences	IEEE Transactions on Information Theory, Vol. 50, No. 5, pp. 903-909, May 2004.
Yates, R.D.	Raman, C. and Mandayam, N.B.	Conference Paper	Fair and Efficient Scheduling of Variable Rate Links via a Spectrum Server	Proceedings of the IEEE International Conference on Communications, Istanbul, Turkey, June 2006, pp.5246-5251.