

# LIST OF PUBLICATIONS

**Dr. Markku Juntti**

11 July 2017

## A. Peer-Reviewed Scientific Articles

### A.1 International Journal Articles

#### 1990s

1. **M. J. Juntti** & B. Aazhang, "Finite memory-length linear multiuser detection for asynchronous CDMA communications". IEEE Transactions on Communications, vol. 45, no. 5, pp. 611–622, May 1997.  
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=592564>
2. **M. J. Juntti**, B. Aazhang & J. O. Lilleberg, "Iterative implementation of linear multiuser detectors for dynamic CDMA systems". IEEE Transactions on Communications, vol. 46, no. 4, pp. 503–508, April 1998.  
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=664306>
3. **M. J. Juntti** & M. Latva-aho, "Bit error probability analysis of linear receivers for CDMA systems in frequency-selective fading channels". IEEE Transactions on Communications, vol. 47, no. 12, pp. 1788–1791, December 1999.  
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=809697>
4. **M. J. Juntti**, "Performance of multiuser detection in multirate CDMA systems". Wireless Personal Communications, vol. 11, no. 3, pp. 293–311, December 1999.  
<http://link.springer.com/article/10.1023/A%3A1018628807970>  
[http://download.springer.com/static/pdf/872/art%253A10.1023%252FA%253A1018628807970.pdf?auth66=1401012840\\_3cedcc2f9bb3cbf8343581b1bf52485b&ext=.pdf](http://download.springer.com/static/pdf/872/art%253A10.1023%252FA%253A1018628807970.pdf?auth66=1401012840_3cedcc2f9bb3cbf8343581b1bf52485b&ext=.pdf)

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5. **M. J. Juntti**, "Performance analysis of linear multisensor multiuser receivers for CDMA in fading channels". IEEE Journal on Selected Areas in Communications – Wireless Communications Series, vol. 18, no. 7, pp. 1221–1229, July 2000.  
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=857922>
6. **M. J. Juntti** & M. Latva-aho, "Multiuser receivers for CDMA systems in Rayleigh fading channels". IEEE Transactions on Vehicular Technology, vol. 49, no. 3, pp. 885–899, May 2000.  
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=845107>
7. M. Latva-aho & **M. Juntti**, "LMMSE detection for DS-CDMA systems in fading channels". IEEE Transactions on Communications, vol. 48, no. 2, pp. 194–199, February 2000.  
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#### 2001

8. Dj. Tujkovic, **M. Juntti** & M. Latva-aho, "Space-frequency-time turbo coded modulation". IEEE Communications Letters, vol. 5, no. 12, pp. 480–482, December 2001.  
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=974492>

#### 2002

9. K. Hooli, **M. Juntti**, M. Heikkilä, P. Komulainen, M. Latva-aho & J. Lilleberg, "Chip-level channel equalization in WCDMA downlink". EURASIP Journal on Applied Signal Processing, Special Issue on 3G Wireless Communications and Beyond, vol. 2002, no. 8, pp. 757–770, August 2002.  
<http://asp.eurasipjournals.com/content/pdf/1687-6180-2002-180318.pdf>
10. D. M. Novakovic, **M. J. Juntti** & M. L. Dukic, "Generalized full/partial closed loop transmit diversity". IEE Electronics Letters, vol. 38, no. 24, pp. 1588–1589, November 21, 2002.  
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1106134>
11. Dj. Tujkovic, **M. Juntti** & M. Latva-aho, "Space-time turbo coded modulation: Design and applications". EURASIP Journal on Applied Signal Processing, Special Issue on Space-Time Coding, vol. 2002, no. 3, pp. 236–248, March 2002.  
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12. D. M. Novakovic, **M. J. Juntti** & M. L. Dukic, "Generalized full/partial closed loop transmit diversity algorithm for WCDMA". European Transactions on Telecommunications, vol. 14, no. 5, pp. 471–477, September/October 2003.

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13. **M. J. Juntti**, A. Rabbachin & K. Pajukoski, "Blind spreading factor detection for DS-CDMA". IEEE Transactions on Communications, vol. 52, no. 9, pp. 1453–1458, September 2004.  
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=1337207>
14. D. Drajić, K. Hooli & **M. Juntti**, "Turbo coding with equalization in WCDMA downlink". Wireless Personal Communications, vol. 28, no. 4, pp. 259–276, March 2004.  
<http://link.springer.com/article/10.1023/B%3AWIRE.0000033599.08396.ef>  
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15. S. Tsumura, M. Vehkaperä, Z. Li, Dj. Tujkovic, **M. Juntti** & S. Hara, "Performance evaluation of turbo and space-time turbo coded MC-CDMA downlink in single and multi-cell environments". IEICE Transactions on Communications, vol. E87-B, no. 10, pp. 3011–3020, Oct. 2004.
16. N. Veselinovic, T. Matsumoto & **M. Juntti**, "A PDF estimation-based iterative MIMO signal detection with unknown interference". IEEE Communications Letters, vol. 8, no. 7, pp. 422–424, July 2004.  
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17. N. Veselinovic, T. Matsumoto & **M. Juntti**, "Iterative MIMO multiuser detection and equalization for STTrC coded system with unknown interference". EURASIP Journal on Wireless Communications and Networking, Special Issue on Special Issue on Multiuser MIMO Networks, vol. 2004, no. 2, pp. 309–321, December 2004.  
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18. **M. Juntti**, M. Vehkaperä, J. Leinonen, S. Tsumura, Z. Li, Dj. Tujkovic, & S. Hara, "MC-CDMA MIMO communications for future cellular systems". IEEE Communications Magazine, vol. 43, no. 2, pp. 118–124, February 2005.  
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19. S. Aromaa, P. Henttu & **M. Juntti**, "Transform selective interference suppression algorithm for spread spectrum communications". IEEE Signal Processing Letters, vol. 12, no. 1, pp. 49–51, January 2005.  
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20. J. Lehtomäki & **M. Juntti**, "Detection of frequency hopping signals using a sweeping channelized radiometer". Signal Processing, Elsevier, vol. 85, no. 10, pp. 2030–2043, October 2005.  
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21. J. Lehtomäki, **M. Juntti**, H. Saarnisaari & S. Koivu, "Threshold setting strategies for a quantized total power radiometer". IEEE Signal Processing Letters, vol. 12, no. 11, pp. 796–799, November 2005.  
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22. J. Lehtomäki, **M. Juntti** & H. Saarnisaari, "CFAR strategies for channelized radiometer". IEEE Signal Processing Letters, vol. 12, no. 1, pp. 13–16, January 2005.  
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23. H. Miao & **M. Juntti**, "Space-time channel estimation and performance analysis for wireless MIMO-OFDM systems with spatial correlation". IEEE Transactions on Vehicular Technology, vol. 54, no. 6, pp. 2003–2016, November 2005.  
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27. P. Silvola, K. Hooli & **M. Juntti**, "Sub-optimal soft-output MAP detector with lattice reduction". IEEE Signal Processing Letters, 2005, vol. 13, no. 6, pp. 321–324, June 2006.  
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28. Y. Wu, **M. Juntti** & T. J. Lim, "Detectors and asymptotic analysis for bandwidth-efficient space-time multiple-access systems". *IEEE Transactions on Communications*, vol. 54, no. 6, pp. 1068–1080, June 2006.  
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29. **M. Juntti**, K. Hooli, K. Kiiskilä & J. Ylioinas, "Space-time equalizers for MIMO high speed WCDMA downlinks". *IEEE Transactions on Wireless Communications*, vol. 6, no. 7, pp. 2582–2592, July 2007.  
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34. J. J. Lehtomäki, J. Vartiainen, **M. Juntti** & H. Saarnisaari, "CFAR outlier detection with forward methods". *IEEE Transactions on Signal Processing*, vol. 55, no. 9, pp. 4702–4706, September 2007.  
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35. H. Miao, K. Yu & **M. J. Juntti**, "Positioning for NLOS propagation: Algorithm derivations and Cramer-Rao bounds". *IEEE Transactions on Vehicular Technology*, vol. 56, no. 5, pp. 2568–2580, September 2007.  
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38. A. Tölli, M. Codreanu & **M. Juntti**, "Cooperative MIMO-OFDM cellular system with soft handover between distributed base station antennas". *IEEE Transactions on Wireless Communications*, vol. 7, no. 4, pp. 1428–1440, April 2008.  
<http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=4489770>
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40. Y. Wu, K. Ruotsalainen & **M. Juntti**, "Optimal unitary space-time constellation design for noncoherent communications with multiple antennas". *IEEE Transactions on Information Theory*, vol. 54, no. 8, pp. 3842–3850, August 2008.  
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41. P. Komulainen, A. Tölli, M. Latva-aho & **M. Juntti**, "Downlink assisted uplink zero-forcing for TDD multiuser MIMO systems". *EURASIP Journal on Wireless Communications and Networking*, Special Issue on 3GPP LTE and LTE Advanced, vol. 2009, 11 pages.  
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47. J. Vartiainen, J. Lehtomäki, H. Saarnisaari, **M. Juntti** & K. Umebayashi, "Two-dimensional signal localization algorithm for spectrum sensing". *IEICE Transactions on Communications*, vol. E93-B, no. 11, pp. 3129–3136, November 2010.
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