

## Bibliography

- [1] E. Lindskog, "Making SMI-beamforming insensitive to the sampling timing for GSM signals", in *Proceedings of the Sixth International Symposium on Personal, Indoor and Mobile Radio Communications, Toronto, Canada, 27-29 September 1995*, pp. 664-668.
- [2] A. S. Kayrallah, R. Ramésh, G. E. Bottomley and D. Koilpillai, "Improved channel estimation with side information", in *Proceedings of VTC '97, vol. 2, Phoenix, AZ, USA, May 4-7 1997*, pp. 1049-1051.
- [3] B. C. Ng and Mats Cedervall, "A structured channel estimator for maximum likelihood sequence detection in multipath fading channels", *IEEE Communication Letters*, vol. 1, no. 2, pp. 52-55, March 1997.
- [4] H. N. Lee and G. J. Pottie, "Channel estimation based adaptive equalization/diversity combining for time-varying dispersive channels", in *Proceedings of VTC '97, vol. 2, Phoenix, AZ, USA, May 4-7 1997*, pp. 884-888.
- [5] R. Steele, *Mobile Radio Communications, Pentech Press Limited, London, 1992*.
- [6] Z. Ding, "Multipath channel identification based on partial system information", *IEEE Transactions on Signal Processing*, pp. 235-240, January 1997.

- 
- [7] E. Lindskog, "Multi-channel maximum likelihood sequence estimation", in *Proceedings of the 47th IEEE Vehicular Technology Conference, vol. 2, Phoenix, Arizona, USA, May 5-7 1997*, pp. 715-719.
- [8] M. Cedervall and R. Moses, "Efficient Maximum Likelihood DOA Estimation for Signals with Known Waveforms in the Presence of Multipath", *IEEE Transactions on Signal Processing*, vol. 45, pp. 808-811, March 1997.
- [9] E. Lindskog, "Array Channel Identification Using Direction of Arrival Parameterization", in *Proceedings of the IEEE International Conference on Universal Personal Communication, Cambridge, Massachusetts, U.S.A, Sept. 29 - Oct. 2, 1996*, vol. 2, pp. 999-1003.
- [10] S. Andersson et. al. , "Ericsson/Mannesmann GSM Field-Trials with Adaptive Antennas", *Proc. 47<sup>th</sup> Vehicular Technology Conference, Phoenix, USA, May 4-7, 1997*.
- [11] P. E. Mogensen, et.al. , "Preliminary Results From an Adaptive Antenna Array Testbed for GSM/UMTS", *Proc. 47<sup>th</sup> Vehicular Technology Conference, Phoenix, USA, May 4-7, 1997*.
- [12] N. Gerlich, " On the Spatial Multiplexing Gain of SDMA for Wireless Local Loop Access", *Research report series No. 161, University of Würzburg*, Jan. 1997.
- [13] U. Forssén et. al. , "Adaptive antenna arrays for GSM900 /DCS1800", *Proceedings 44<sup>th</sup> Vehicular Technology Conference, Stockholm, Sweden, June 7-10, 1994*.
- [14] TSUNAMI Partners, "Report on the benefits of adaptive antennas for cell architecture", *ERA Report 95-0829, England, Sept. 1995*.

- [15] TSUNAMI Partners, "Report on the analysis of the field trial results", *ERA Report 96-0229, ERA Technology, England*.
- [16] T. Ohgane, N. Matsuzawa, T. Shimura, M. Mizuno, "BER Performance of CMA Adaptive Array for High-Speed GMSK Mobile Communication -A Description of Measurements in Central Tokyo", *IEEE Transactions on Vehicular Technology*, vol.42, no.4, pp.484-489, November 1993.
- [17] P. Zetterberg, "Mobile Communication with Base Station Antenna Arrays: Propagation Modeling and System Capacity", *Licentiate Thesis, Dept. Of Signals, Sensors and Systems, Royal Institute of Technology, Sweden, 1995*.
- [18] D. Gerlach, A. Paulraj, "Adaptive Transmitting Antenna Arrays with Feedback", *IEEE Signal Processing Letters*, vol. 1, no. 10, pp. 150-152, October 1994.
- [19] H. Andersson, M. Landing, A. Rydberg, T. Öberg, "The Influence of Coherent Signals on Algorithms for Adaptive Antennas in mobile Communications", *Proceedings NRS-95, Saltsjöbaden, Sweden, April 1995*.
- [20] R. T. Compton, "Adaptive Antennas, Concepts and Performance", *Prentice-Hall, Engelwood Cliffs, New Jersey, 1988*.
- [21] N. Gustafsson and T. Winlöf, "Implementing the SMI algorithm in an adaptive base station antenna for the DCS-1800 system", *Master of Science Thesis, Department of Science and Technology in Sundsvall, Jan. 1997*.
- [22] M. Appelgren, "Field Trials with an Adaptive Antenna for Mobile Communications", in *Proceedings of the Antenn 97 conference, Gothenburg*, pp. 367-374, 1997.

- [23] M. W. Gantz, R. L. Moses and S. L. Wilson, "Convergence of the SMI Algorithms with Weak Interference", *IEEE Transactions on Antennas and Propagation*, vol. 38, no. 3, pp. 394-399, Mar. 1990.
- [24] H. Steyskal, "Array Error Effects in Adaptive Beamforming", *Microwave Journal*, Sept. 1991.
- [25] J. H. Winters, J. Salz and R. D. Gitlin, "The impact of antenna diversity on the capacity of wireless communication systems", *IEEE Transactions on Communications*, vol. 42, pp. 1740-1751, 1994.
- [26] G. V. Tsoulos and M. A. Beach, "Calibration and linearity issues for an adaptive antenna system", in *Proceedings of the IEEE Vehicular Technology Conference*, 1997, pp. 1597-1600.
- [27] L. C. Godara, "The effect of phase-shifter errors on the performance of an antenna-array beamformer", *IEEE Journal of Oceanic Engineering*, vol.10, pp. 278-284, 1985.
- [28] R. Davis and P. J-S. Sher, "Quantization noise in adaptive weighting networks", *IEEE Transactions on Aerospace and Electronic Systems*, vol. 20, no. 5, pp. 547-559, 1984.
- [29] R. Nitzberg, "Effect of errors in adaptive weights", *IEEE Transactions on Aerospace and Electronic Systems*, vol. 12, no. 3, pp. 369-373, 1976.
- [30] H-C. Lin, "Spatial correlation in adaptive arrays", *IEEE Transactions on Antennas and Propagation*, vol. 30, no. 2, pp. 212-223, 1982.
- [31] H. Krim and M. Viberg, "Two decades of array signal processing: The parametric approach", *IEEE Signal Processing Magazine*, pp. 67-94, July 1996.

- 
- [32] J. Litva and T. K-Y. Lo, *Digital beamforming in wireless communications*, Artech House Publ. Boston, USA, 1996.
- [33] Hudson J. E., *Adaptive array principles*, Peter Peregrinus ltd., New York, 1981.
- [34] TSUNAMI Partners, "Baseline Technology", *ERA Report 95-0825*, Bristol, 1994.
- [35] J. A. Wepman, "Analog-to-digital converters and their applications in radio receivers", *IEEE Communications Magazine.*, vol.33, no.5, May 1995; pp. 39-45.
- [36] R. A. Monzingo and T.W. Miller, *Introduction to Adaptive Arrays*, John Wiley and Sons, New York, 1980.
- [37] J. Strandell et. al. "Experimental evaluation of an adaptive antenna for a TDMA mobile telephone system", in *Proceedings of the IEEE Personal Indoor and Mobile Radio Communication conference, Helsinki, Finland*, pp. 79-84, 1997.
- [38] J. Strandell et. al. "Design and evaluation of a fully adaptive antenna for telecommunication systems", in *Proceedings of the Antenn 97 conference, Gothenburg*, pp. 357-366, 1997.
- [39] M. Viberg and A. L. Swindlehurst, "A Bayesian Approach to Auto-Calibration for Parametric Array Signal Processing", *IEEE Transactions on Signal Processing*, vol. 42, no.12, pp. 3495-3506, Dec. 1994.
- [40] B. D. Carlson, "Covariance Estimation Errors and Diagonal Loading in Adaptive Arrays", *IEEE Transactions on Aerospace and Electronic Systems*, vol. 24, no. 4, pp. 397-401, July 1988.

- 
- [41] D. J. Y. Lee and C. Xu, "Capacity and Trunking Efficiency of Smart Antennas", in *Proceedings of the IEEE Vehicular Technology Conference*, 1997, pp.612-616.
- [42] T. Söderström and P. Stoica, "System Identification", *Prentice-Hall, Engelwood Cliffs, New Jersey*, 1989.
- [43] A. J. Viterbi, "Error bounds for convolutional codes and an asymptotically optimum decoding algorithm", *IEEE Transactions on Information Theory*, vol. 13, pp. 260-269, April 1967.
- [44] E. Lindskog, "Array Channel Identification Using Direction of Arrival Parameterization", in *Proceedings of IEEE International Conference on Universal Personal Communications*, Cambridge, Massachusetts, U.S.A, Sept. 29-Oct 2 1996, pp. 999-1003.
- [45] K. J. Åström, "Introduction to Stochastic Control Theory", *Academic Press Inc., New York*, 1970.
- [46] L. Lindbom, "A Wiener Filtering Approach to the Design of Tracking Algorithms", *Ph. D. Thesis, Department of Technology, Uppsala University, Uppsala, Sweden*, 1995.