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Peer-Reviewed Journal Papers

- [J27] Florian Xaver, Gerald Matz, Peter Gerstoft and Christoph Mecklenbräuer: Localization of Acoustic Sources using a Decentralized Particle Filter, EURASIP Journal on Wireless Communications and Networking, Special Issue on Localization in Mobile Wireless and Sensor Networks, to be published 2011.
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- [J17] Thomas Zemen, Christoph F. Mecklenbräuker, Florian Kaltenberger, Bernard H. Fleury: *Minimum-Energy Band-Limited Predictor with Dynamic Subspace Selection for Time-Variant Flat-Fading Channels*, in IEEE Transactions on Signal Processing, Vol. 55, No. 9, pp. 4534–4548, Sep. 2007.
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- [Jx] Philipp K. Gentner, Geoff Hilton, Mark A. Beach, Christoph F. Mecklenbräuer: *Characterization of an UWB Antenna Array with Spacings Following a Geometric Progression*, IET Communications, submitted November 2010, second round of reviews.

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- [B5] Laura Bernadó, Oliver Klemp, Andreas Kwoczek, Christoph F. Mecklenbräuer, Alexander Paier, Moritz Schack, Katrin Sjöberg, Erik Ström, Elisabeth Uhlemann, Thomas Zemen: *Vehicle-to-Vehicle communications*, Chapter 15 in *Pervasive Mobile and Ambient Wireless Communications*, Roberto Verdone, Alberto Zanella (Eds.), Springer Verlag London Limited, to be published 2011.
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Doctoral Thesis

- [D] Christoph F. Mecklenbräuer: *Parameterschätzung und Hypothesentests für akustische Wellenfelder unter Berücksichtigung der physikalischen Ausbreitungsbedingungen*, Shaker Verlag GmbH, Aachen, 1998.

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- [C126] Nikola Gvozdenovic, Philipp K. Gentner, Christoph F. Mecklenbräuer: Antenna Array for the reader of an Ultra-Wideband identification tag with On-Chip Antenna, in Proc. Loughborough Antennas and Propagation Conference (LAPC 2011), Loughborough, UK, Nov. 14–15, 2011.
- [C125] Bujar Krasniqi, Christoph F. Mecklenbräuer: Maximization of the Minimum Rate by Geometric Programming for Multiple Users in Partial Frequency Reuse Cellular Networks, in Proc. 2011 IEEE 74th Vehicular Technology Conference, San Francisco (CA), USA, Sep. 5–8, 2011.
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Presentations and Invited Talks

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- [T38] Christoph F. Mecklenbräuker, Bujar Krasniqi: Power Efficiency of Partial Frequency Reuse for Cellular Networks, University of Southern California (USC), Los Angeles, Aug. 17, 2011.
- [T37] Christoph F. Mecklenbräuker, Florian Xaver, Gerald Matz, Peter Gerstoft: Distributed Wave-Field Parameter Estimation Using a Particle Filter, ETH Zurich, Jun. 17, 2011.
- [T36] Christoph F. Mecklenbräuker, Florian Xaver, Gerald Matz, Peter Gerstoft: Distributed Wave-Field Parameter Estimation Using a Particle Filter, TU Darmstadt, Jun. 8, 2011.
- [T35] Christoph F. Mecklenbräuker: Proofs for the Maximum Entropy Property of the Normal Distribution, in Proc. Joint Workshop on Coding and Communications (JWCC 2010), Santo Stefano Belbo, Oct. 18–19, 2010.

- [T34] Christoph F. Mecklenbräuker, Arrate Alonso, Alexander Paier, Thomas Zemen, Nicolai Czink, Fredrik Tufvesson: MIMO Capacity Evaluation of Measured Ricean Vehicle-to-Vehicle Radio Channels at 5.2 GHz, ETH Zurich, Jun. 11, 2010.
- [T33] Christoph F. Mecklenbräuker, Arrate Alonso, Alexander Paier, Thomas Zemen, Nicolai Czink, Fredrik Tufvesson: MIMO Capacity Evaluation of Measured Ricean Vehicle-to-Vehicle Radio Channels at 5.2 GHz, Chalmers University of Technology, Göteborg, Sweden, Apr. 28, 2010.
- [T32] Christoph F. Mecklenbräuker, Alexander Paier, Pavle Belanovic, Samaneh Shooshtary, Nuria Martí Boix, Mahdi Abbasi, Manuel Zaera, Thomas Zemen: Wireless Access for Vehicular Environments (IEEE 802.11p), ftw. member tutorial *Traffic Telematics*, Vienna, Nov. 5, 2008.
- [T31] Christoph F. Mecklenbräuker, Alexander Paier, Thomas Zemen, Gerald Matz, Andreas F. Molisch: On the Temporal Evolution of Signal Subspaces in Vehicular MIMO Channels in the 5 GHz Band, in Proc. Joint Workshop on Coding and Communications (JWCC 2008), St. Helena (CA), USA, Oct. 26–28, 2008 (invited).
- [T30] Christoph F. Mecklenbräuker, Alexander Paier, Johan Karedal, Nicolai Czink, Gerald Matz, Helmut Hofstetter, Charlotte Dumard, Thomas Zemen, Fredrik Tufvesson, Andreas F. Molisch: “Analysis of time-variant channel measurements with the Lund channel sounder,” presented at Norges Teknisk-Naturvitenskapelige Universitet (NTNU), Trondheim, Norway, Jun. 9, 2008.
- [T29] Christoph F. Mecklenbräuker, Pei-Jung Chung, Dirk Maiwald, Nicolai Czink, Bernard H. Fleury: “*Model Identification for Wireless Propagation with Control of the False Discovery Rate*,” presented at Advanced Lectures in Wireless Communications, Technische Universität München, Germany, Apr. 8, 2008.
- [T28] Christoph Mecklenbräuker, Maxime Guillaud, Roland Tresch and Marius Pesavento: “*MU-MIMO schemes in current standards for 3GPP Long Term Evolution, Wireless LAN, and WiMax*,” presented at Multi-user MIMO Industry Course, Nokia Research Center, Helsinki, Finland, Nov. 16, 2007.
- [T27] Christoph Mecklenbräuker, Giulio Coluccia, Giorgio Taricco, Christian Mehlführer and Sebastian Caban : “*MU-MIMO scheme performance evaluations using measured channels in specific environments*,” presented at Multi-user MIMO Industry Course, Nokia Research Center, Helsinki, Finland, Nov. 16, 2007.

- [T26] Christoph Mecklenbräuker, Pei-Jung Chung, Dirk Maiwald, Nicolai Czink, Bernard H. Fleury: Determining the Number of Propagation Paths from Broadband MIMO Measurements via the False Discovery Rate Criterion, presented at Chalmers University, Göteborg, Sweden, Oct. 25, 2007.
- [T25] Christoph Mecklenbräuker, Alexander Paier, Johan Karedal, Nicolai Czink, Helmut Hofstetter, Charlotte Dumard, Thomas Zemen, Fredrik Tufvesson, Andreas F. Molisch: “*Challenges in vehicular communications for impactive systems — Dynamics, Doppler, and Delay*,” presented at Joint Workshop on Coding and Communications (JWCC 2007), Dürnstein, Austria, Oct. 16, 2007.
- [T24] Christoph Mecklenbräuker: “*Das Handy frisst den iPod u.v.m.*,” presented at TU Wien, Austria, Jun. 14, 2007.
- [T23] Christoph Mecklenbräuker and Olaf Albert: “*An Impulse Radio Demonstrator for 4-PPM*,” presented at Universität Bremen, Bremen, Germany, May 30, 2007.
- [T22] Olaf Albert and Christoph F. Mecklenbräuker: “*An 8-bit programmable fine delay circuit with step size 65ps for an ultrawideband pulse position modulation testbed*,” presented at the IEEE Austria Section’s UWB Forum on Sensing and Communication, Johannes Kepler Universität Linz, Linz, Austria, Mar. 14, 2007.
- [T21] Christoph Mecklenbräuker: “*An Impulse Radio Ultra Wideband Multiuser Transmission Scheme for Wireless Personal Area Networks Applications*,” UWB Workshop 2005, hosted by Linz Center of Competence for Mechatronics (LCM), Linz, Austria, Mar. 2, 2005.
- [T20] Olaf Albert and Christoph Mecklenbräuker: “*Practical Aspects of the UWB Testbed Implementation*,” UWB Workshop 2004, hosted by Siemens PSE PRO RCD, Vienna, Austria, Oct. 20, 2004.
- [T19] Christoph Mecklenbräuker and Olaf Albert: “*Early-Late Synchroniser: Simulation Results and Comparison with the Testbed*,” UWB Workshop 2004, hosted Siemens PSE PRO RCD, Vienna, Austria, Oct. 20, 2004.
- [T18] Olaf Albert and Christoph F. Mecklenbräuker: “*UWB Channel Measurements in Linz*”, Centro Tecnologia Telecommunication Catalunya (CTTC), Barcelona, Spain, Jul. 27, 2004.
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