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October 2, 2021

Peer-Reviewed Journal Papers

- [J77] Mark Wagner, Herbert Groll, Ali Dormiani, Venkatesh Sathyanarayanan, Christoph Mecklenbräuer, Peter Gerstoft: Phase Coherent EM Array Measurements in a Refractive Environment, *IEEE Trans. Antennas and Propagation*, submitted 18-Jun-2020, accepted, 14-Feb-2021, fist published 05-Apr.2021. doi:10.1109/TAP.2021.3069516
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- [J75] Orlando Trindade, Taulant Berisha, Philipp Svoboda, Efstathia Bura, Christoph F. Mecklenbräuer, Assessment of Treatment Influence in Mobile Network Coverage on board High-Speed Trains, *IEEE Access*, Vol. 8, 162945–162960, submitted 6 Aug 2020, accepted Aug 26 2020, published 3 Sep 2020. doi:10.1109/ACCESS.2020.3021647
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Submitted Journal Papers

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Book Chapters

- [B7] Aniruddha Chandra, Aleš Prokeš, Jiří Blumenstein, Pavel Kukolev, Joseph Vychodil, Tomas Mikusalek, Thomas Zemen, Christoph F. Mecklenbräuer: “Intra Vehicular Wireless Channel Measurements,” in: “European Project Space on Information and Communication Systems”, C. Angot, O. Camp (Hrg.); SCITEPRESS - Science and Technology Publications, Lda., Angers, France, 2015, ISBN: 978-989-758-155-7, S. 3 - 27.
- [B6] Laura Bernadó, Nicolai Czink, Thomas Zemen, Alexander Paier, Fredrik Tufvesson, Christoph F. Mecklenbräuer, Andreas F. Molisch, *Vehicular Channels*, Chapter 6 in *LTE-Advanced and Next Generation Wireless Networks: Channel Modelling and Propagation*, Guillaume de la Roche, Andrés Alayón, and Ben Allen (Eds.), John Wiley and Sons, Chichester, United Kingdom, pp. 153–185, Print ISBN: 978-1-119-97670-7, Web ISBN: 1-119976-70-7, eISBN: 978-1-118-41101-8, Pages in Print Edition: 566, Nov. 28, 2012. DOI: 10.1002/9781118410998.ch6
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- [C1] Ali-Reza Baghai-Wadji and Christoph F. Mecklenbräuker: “*Propagation of Piezoelectric Waves in Singly and Doubly Periodic Metallic Gratings*”, in Proc. EFTF 91, 5th European Frequency and Time Forum, Besançon, France, pp. 66–72, Mar. 1991.

Presentations and Invited Talks

- [T47] Christoph Mecklenbräuker and Shengya Zhao: Shape Your Desired Wireless Propagation with Reconfigurable Intelligent Surfaces, Plenary Talk at ChaseOn and GHz Centre Day, Göteborg, Sweden, Nov. 18, 2020.
- [T46] Shrief Rizkalla, Christoph F. Mecklenbräuker, Ralf R. Müller: Direction of Arrival Estimation using Dual LASSO with Reed-Solomon Error Evaluation Algorithms, Information Theory and Applications Workshop (ITA 2018), San Diego (CA), USA, Feb. 15, 2018.

- [T45] Peter Gerstoft, Christoph Mecklenbräuer, Aggeliki Xenaki, Santosh Nannuru: Multi Snapshot Sparse Bayesian Learning for DOA Estimation, Guest Lecture, FAU Erlangen–Nürnberg, Germany, June 12, 2017 (invited).
- [T44] Peter Gerstoft, Christoph Mecklenbräuer, Aggeliki Xenaki, Santosh Nannuru: Multisnapshot Sparse Bayesian Learning for DOA, Poster Presentation at IEEE ICASSP 2017 of IEEE Signal Processing Letters paper [J50], New Orleans (LA), USA, Mar. 7, 2017.
- [T43] Christoph Mecklenbräuer and Peter Gerstoft: Sparse Bayesian Learning for Wavefields from Sensor Array Data, in Proc. Information Theory and Applications Workshop (ITA 2016), San Diego (CA), USA, Feb. 2016 (invited).
- [T42] Christoph Mecklenbräuer and Peter Gerstoft: Sequential Bayesian Reconstruction of Sparse Source from Sensor Array Data in Proc. Information Theory and Applications Workshop (ITA 2014), San Diego (CA), USA, Feb. 2014 (invited).
- [T41] Peter Gerstoft and Christoph F. Mecklenbräuer: Bayesian sequential sparse sampling, 21st International Congress on Acoustics (ICA 2013), Montreal, Canada, June 2–7, 2013.
- [T40] Martin Böck, Andreas Kugi, Christoph F. Mecklenbräuer: Maximierung der Dienstgüte in Drahtlosnetzen mittels Methoden der dynamischen Optimierung, Workshop GMA-Fachausschuss 1.40 “Theoretische Verfahren der Regelungstechnik”, Salzburg, Austria, Sep. 18–21, 2011.
- [T39] Christoph F. Mecklenbräuer, Compressive Sensing and Bayesian Sparse Wideband Source Reconstruction of Japanese 2011 Earthquake, Scripps Institute of Oceanography, University of California San Diego (UCSD), Aug. 19, 2011.
- [T38] Christoph F. Mecklenbräuer, Bujar Krasniqi: Power Efficiency of Partial Frequency Reuse for Cellular Networks, University of Southern California (USC), Los Angeles, Aug. 17, 2011.
- [T37] Christoph F. Mecklenbräuer, Florian Xavier, Gerald Matz, Peter Gerstoft: Distributed Wave-Field Parameter Estimation Using a Particle Filter, ETH Zurich, Jun. 17, 2011.
- [T36] Christoph F. Mecklenbräuer, Florian Xavier, 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 Mecklenbräuer, 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 Mecklenbräuer, 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 Mecklenbräuer, 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 Mecklenbräuer: “*Das Handy frisst den iPod u.v.m.,*” presented at TU Wien, Austria, Jun. 14, 2007.
- [T23] Christoph Mecklenbräuer 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. Mecklenbräuer: “*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 Mecklenbräuer: “*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 Mecklenbräuer: “*Practical Aspects of the UWB Testbed Implementation,*” UWB Workshop 2004, hosted by Siemens PSE PRO RCD, Vienna, Austria, Oct. 20, 2004.
- [T19] Christoph Mecklenbräuer 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. Mecklenbräuer: “*UWB Channel Measurements in Linz*”, Centro Technologia Telecommunication Catalunya (CTTC), Barcelona, Spain, Jul. 27, 2004.
- [T17] Olaf Albert and Christoph F. Mecklenbräuer: “*Testbed for Low-Power Short-Range UWB Transmission*”, Centro Technologia Telecommunication Catalunya (CTTC), Barcelona, Spain, Jul. 27, 2004.
- [T16] Christoph F. Mecklenbräuer and Steffen Paul: “*SNR Estimation from BPSK and QPSK Signals*”, Arbeitsgemeinschaft Kommunikation im Kleinwalsertal (KiK 2004), Riezlern, Austria, Jul. 12, 2004.
- [T15] Christoph F. Mecklenbräuer: “*Throughput simulation for UMTS radio access networks with smart antennas*”, Universität Rostock, Rostock, Germany, Feb. 17, 2004.
- [T14] Christoph F. Mecklenbräuer: “*Throughput simulation for UMTS radio access networks with smart antennas*”, Technische Universität Darmstadt, Darmstadt, Germany, Dec. 18, 2003.
- [T13] Marius Pesavento, Christoph F. Mecklenbräuer and Johann F. Böhme: “*Multi-dimensional Rank Reduction Estimator for Parametric MIMO Channel Models*”, Eidgenössische Technische Hochschule, Zurich, Switzerland, Jun. 26, 2003.
- [T12] Christoph F. Mecklenbräuer: “*Low-Power Testbed for Short-Range Data Transmission via Ultra-Wideband Radio Pulses*”, Johannes Kepler Universität Linz, Linz, Apr. 14, 2002.
- [T11] Christoph F. Mecklenbräuer: “*Ultra Wideband Radio*”, ftw. member tutorial *Wireless Communications*, Vienna, Dec. 5, 2002.
- [T10] Christoph F. Mecklenbräuer and Markus Rupp: “*Über Erweiterungen des Alamouti-Schemas für die Space-Time Codierung*”, Seminar *Netzwerktheorie und Signalverarbeitung*, Technische Universität München, Munich, Germany, Jun. 5, 2002.
- [T9] Christoph F. Mecklenbräuer and Ralf R. Müller: “*The Wireless Multiple-Input, Multiple-Output Channel: Measurements, Double-Directional Parameters, and Capacity*”, Int. Symp. Advanced Radio Technologies (ISART’02), ITS/NIST, Boulder (CO), USA, Mar. 4–6, 2002.
- [T8] Christoph F. Mecklenbräuer: “*Channel Estimation for Antenna Arrays*”, ftw. member tutorial *Wireless Communications*, Vienna, Jan. 30, 2002.

- [T7] Christoph F. Mecklenbräuer: “*Smart Antennas*”, Future Telecommunications Workshop, Wiener Telekom-Tag’01, Vienna, Nov. 15, 2001.
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