

JOURNALS

- [25] V. Deniau, C. Gransart, G. Romero, E. P. Simon, J. Farah, "IEEE 802.11n Communications in the Presence of Frequency-Sweeping Interference Signals", *IEEE Trans. Electromagn. Compat.*, 2017.
- [24] S. Kharbech, I. Dayoub, M. Zwingelstein-Colin, E. Simon "On Classifiers for Blind Feature-Based Automatic Modulation Classification over MIMO Channels" *IET Commun.*, 2016.
- [23] E.P. Simon, F. Kaltenberger, "Inter-Carrier Interference Analysis for High Speed Trains based on Broadband Channel Measurements," *IEEE Antennas Wireless Propag. Lett.*, vol. 15, no. , pp. 1502-1505, 2016
- [22] F. Zaarour, E.P. Simon, "Fast Time-Varying Channel Estimation for OFDM Systems With Narrowband Interference", *IEEE Wirel. Commun. Lett.*, vol. 4, 2015
- [21] H. Shu, E.P. Simon, L. Ros, "On the Use of Tracking Loops for Low-Complexity Multi-Path Channel Estimation in OFDM Systems", *Elsevier Signal Process.*, 2015
- [20] A. Kalakech, M. Berbineau , I. Dayoub, E.P. Simon, "Time Domain LMMSE Channel Estimator Based on Sliding Window for OFDM Systems in High Mobility Situations", *IEEE Trans. Veh. Technol.*, vol. , 13 pages, 2015.
- [19] L. Ros, H. Hijazi, E.P. Simon, "Complex amplitudes tracking loop for multipath channel estimation in OFDM systems under slow to moderate fading", *Elsevier Signal Process.*, vol. 97, 134-145, 2014.
- [18] H.Q. Shu, L. Ros, E.P. Simon, "Third-order complex amplitudes tracking loop for slow flat fading channel online estimation", *IET Commun.*, vol. 8, no. 3, 360-371, 2014.
- [17] S. Kharbech, I. Dayoub, M. Zwingelstein-colin, E. Simon, K. Hassan, "Blind digital modulation identification for time-selective MIMO channels", *IEEE Wirel. Commun. Lett.*, vol. 3, no. 4, 373-376, 2014.
- [16] H. Shu, L. Ros, E. Simon, "Simplified random-walk-model-based Kalman filter for slow to moderate fading channel estimation in OFDM systems", *IEEE Trans. Signal Process.*, vol. 62, no. 15, 4006-4017, 2014.
- [15] J. Fang, E.P. Simon, M. Berbineau, M. Lienard, "Joint channel and phase noise estimation in OFDM systems at very high speeds", *AEU-Int. J. Electron. Commun.*, vol. 67, no. 4, 295-300, 2013.
- [14] H.Q. Shu, E.P. Simon, L. Ros, "Third-order Kalman filter : tuning and steady-state performance", *IEEE Signal Process. Lett.*, vol. 20, no. 11, 1082-1085, 2013.
- [13] E.P. Simon, M.A. Khalighi, "Iterative soft-Kalman channel estimation for fast time-varying MIMO-OFDM channels", *IEEE Wirel. Commun. Lett.*, vol. 2, no. 6, 599-602, 2013.
- [12] T. Peng, Y. Xiao, S.Q. Li, H.Q. Shu, E.P. Simon, "Channel estimation for SCM-OFDM systems by modified Kalman filter", *Commun. Netw.*, vol. 5, no. 3B, 668-672, 2013.
- [11] T. Peng, Y. Xiao, S.Q. Li, H.Q. Shu, E.P. Simon, "Signal Detection for OFDM-IDMA Uplink over Doubly Selective Channels", *Commun. Netw.*, 5(03), 249, 2013.
- [10] E.P. Simon, L. Ros, H. Hijazi, M. Ghogho, "Joint carrier frequency offset and channel estimation for OFDM systems via the EM algorithm in the presence of very high mobility", *IEEE Trans. Signal Process.*, vol. 60, no. 2, 754-765, 2012.
- [9] E. Simon, L. Ros, H. Hijazi, J. Fang, D. Gaillot, M. Berbineau, "Joint carrier frequency offset and fast time-varying channel estimation for MIMO-OFDM systems", *IEEE Trans. Veh. Technol.*, vol. 60, no. 3, 955-965, 2011.
- [8] E.P. Simon, D.P. Gaillot, V. Degardin, "Synchronization sensitivity of block-IFDMA systems", *IEEE Trans. Wirel. Commun.*, vol. 9, no. 1, 256-267, 2010.
- [7] J.M. Molina-garcia-pardo, M. Lienard, P. Degauque, E. Simon, L. Juan-llacer, "On MIMO channel capacity in tunnels", *IEEE Trans. Antennas Propag.*, vol. 57, no. 11, 3697-3701, 2009.
- [6] E.P. Simon, V. Degardin, M. Lienard, "Impact of carrier frequency offsets on Block-IFDMA systems", *EURASIP J. Wirel. Commun. Netw.*, vol. 2009, 483128-1-7, 2009.

- [5] V. Degardin, M. Lienard, P. Degauque, E. Simon, P. Laly, “Impulsive noise characterization of in-vehicle power line”, *IEEE Trans. Electromagn. Compat.*, vol. 50, no. 4, 861-868, 2008.
- [4] E. Simon, R. Legouable, M. Helard, M. Lienard, “Impact of phase and timing jitter on IFDMA systems”, *Eur. Trans. Telecomm.*, vol. 19, no. 6, 697-705, 2008.
- [3] E. Simon, L. Ros, K. Raoof, “Synchronization over rapidly time-varying multipath channel for CDMA downlink RAKE receivers in time-division mode”, *IEEE Trans. Veh. Technol.*, vol. 56, no. 4, 2216-2225, 2007.
- [2] L. Ros, E. Simon, Y. Nasser, “Revue de la boucle à remodulation pour la synchronisation de phase en modulation linéaire multi-voie avec trajets multiples. Application en CDMA et OFDM” REE, Rev. Electr. Electron., vol. 4, 55-67, 2005.
- [1] E. Simon, K. Raoof, L. Ros, “Synchronisation conjointe rythme et phase en CDMA optimisée dans un contexte multi-utilisateur” Ann. Telecommun., vol. 59, no. 3-4, 412-438, 2004.

CONFERENCES

- [28] M. Kousri, V. Deniau, J. Rioult, G. Romero, E.P. Simon, “Comparative Study of Transient Disturbances Impact on 2G and 4G Telecommunication Systems in a Railway Context”, URSI 2017
- [27] G. Romero, E.P. Simon, V. Deniau, C. Gransart, M. Kousri, “ Evaluation of an IEEE 802.11n Communication System in presence of Transient Electromagnetic Interferences from the Pantograph-Catenary Contact”, URSI 2017, invited paper, young scientist award
- [26] P. Laly, D.P. Gaillot, E.P. Simon, M. Liénard, E. Tanghe, W. Joseph, L. Martens, “Real-time MIMO channel Sounder based on a highly flexible Software Architecture”, EuCNC, Paris, France, June 29/July 2, 2015
- [25] A. Kalakech, R. Darazi, M. Berbineau, E. Simon, I Dayoub, “Iterative time domain estimation of rapidly changing channel for OFDM systems in a cognitive radio context”, IEEE Technological Advances in Electrical, Electronics and Computer Engineering (TAEECE), 2015
- [24] F. Zaarour, E. Simon, M. Zwingelstein-Colin, and I. Dayoub, “A low complexity turbo receiver for data nulling superimposed pilots in OFDM”, Digital Information and Communication Technology and its Applications (DICTAP), 2015
- [23] F. Zaarour, E. Simon, M. Zwingelstein-Colin, and I. Dayoub, “Comparison of superimposed pilot schemes in iterative receivers for OFDM systems”, IEEE Broadband Multimedia Systems and Broadcasting (BMSB), 2015
- [22] F. Kaltenberger, A. Byiringiro, G. Arvanitakis, R. Ghaddab, D. Nussbaum, R. Knopp, M. Bernineau, Y. Cocheril, H. Philippe, E. Simon, ”Broadband Wireless Channel Measurements for High Speed Trains”, Communications (ICC), 2015 IEEE International Conference on. IEEE, 2015. p. 2620-2625.
- [21] S. Mebaley-ekome, L. Clavier, A. Frappe, E. Simon, I. Sourikopoulos, “Estimation of 60-GHz channels based on energy detection” , IEEE International Conference on Ultra-Wideband, ICUWB 2014, Paris, France, september 1-3, e-ISBN 978-1-4799-5396-7, 68-73, 2014.
- [20] M. Berbineau, E. Masson, Y. Cocheril, A. Kalakech, J.P. Ghys, I. Dayoub, S. Kharbech, M. Zwingelstein-colin, E. Simon, N. Haziza, R. Painchault, R. Gautier, K. Hassan, K.J. De La Rosa, P. Radoi E., Nussbaum D., Knopp R., Bonnin J.m., Singh K.d., Lee J.h., Philippe H., Ghannoum H., Sanz D., Massy, “Cognitive radio for high speed railway through dynamic and opportunistic spectrum reuse” , Transport Research Arena, TRA 2014, Paris, France, april 14-17, paper 18510, 10 pages, 2014.
- [19] H.Q. Shu, L. Ros, E.P. Simon, “Complex amplitudes tracking loop for multi-path channel estimation in OFDM systems : synthesis and extension” , 6th International Symposium on Communications, Control and Signal Processing, ISCCSP 2014, Athens, Greece, may 21-23, ISBN 978-1-4799-2890-3, paper T2L-C.2, 340-343, 2014.
- [18] S. Kharbech, I. Dayoub, E. Simon, M. Zwingelstein-colin, “Blind digital modulation detector for MIMO systems over high-speed railway channels” , 5th International Workshop on Communication Technologies for Vehicles, Nets4Cars/Nets4Trains 2013, Lille, France, may 14-15 Lecture Notes in Computer Science, vol. 7865, 232-241, 2013.
- [17] H.Q. Shu, L. Ros, E.P. Simon, “Third-order complex amplitudes tracking loop for slow fading channel estimation” , 19th International Conference on Telecommunications, ICT 2012, Jounieh, Lebanon, april 23-25, ISBN 978-1-4673-0745-1, 1-6, 2012.

- [16] H. Hijazi, L. Fawaz, A. Akra, E.P. Simon, “Hybrid Cramer-Rao bound for dynamical time-varying channel and carrier frequency offset estimation in OFDM systems” , 19th International Conference on Telecommunications, ICT 2012, Jounieh, Lebanon, april 23-25, ISBN 978-1-4673-0745-1, 1-6, 2012.
- [15] E. Simon, M. Berbineau, M. Lienard, “Joint CFO and channel acquisition and tracking based on parametric channel modeling for OFDM systems in the presence of high mobility” , 11th International Conference on Intelligent Transport Systems Telecommunications, ITST 2011, Saint Petersburg, Russia, august 22-25, ISBN 978-1-61284-668-2, 565-570, 2011.
- [14] L. Ros, E.P. Simon, “Second-order modeling for Rayleigh flat fading channel estimation with Kalman filter” , 17th International Conference on Digital Signal Processing, DSP 2011, Corfu, Greece, july 6-8, ISBN 978-1-4577-0273-0, 1-6, 2011.
- [13] V. Degardin, E.P. Simon, M. Morelle, M. Lienard, P. Degauque, I. Junqua, S. Bertuol, “On the possibility of using PLC in aircraft” , IEEE International Symposium on Power Line Communications and its Applications, ISPLC 2010, Rio de Janeiro, Brazil, march 28-31, ISBN 978-1-4244-5009-1, 337-340, 2010.
- [12] E.P. Simon, H. Hijazi, L. Ros, “Joint carrier frequency offset and fast time-varying channel estimation for MIMO-OFDM systems” , 7th International Symposium on Communication Systems Networks and Digital Signal Processing, CSNDSP 2010, Newcastle, UK, july 21-23, ISBN 978-1-4244-8858-2, 167-172, 2010.
- [11] E.P. Simon, H. Hijazi, L. Ros, M. Berbineau, P. Degauque, “Joint estimation of carrier frequency offset and channel complex gains for OFDM systems in fast time-varying vehicular environments” , IEEE International Conference on Communications, ICC 2010, Workshop W3 on Vehicular Connectivity, Cape Town, South Africa, may 23-27, ISBN 978-1-4244-6824-9, 1-5, 2010.
- [10] L. Ros, H. Hijazi, E.P. Simon, “Paths complex gain tracking algorithms for OFDM receiver in slowly-varying channels” , 4th International Symposium on Communications, Control and Signal Processing, ISCCSP 2010, Limassol, Cyprus, march 3-5, ISBN 978-1-4244-6285-8, 1-6, 2010.
- [9] H. Hijazi, E.P. Simon, M. Lienard, L. Ros, “Channel estimation for MIMO-OFDM systems in fast time-varying environments” , 4th International Symposium on Communications, Control and Signal Processing, ISCCSP 2010, Limassol, Cyprus, march 3-5, ISBN 978-1-4244-6285-8, 1-6, 2010.
- [8] J. M. Molina-Garcia-Pardo, M.Lienard, E. Simon, P.Degauque, “MIMO IN TUNNELS: INFLUENCE OF THE POSITION OF THE ARRAY ELEMENTS ON THE CHANNEL CAPACITY”. In Proceedings of the IASTED International Conference (Vol. 648, p. 018).
- [7] J.M. Molina-garcia-pardo, M. Lienard, E. Simon, P. Degauque, “On the possibility of applying polarization diversity to MIMO techniques in tunnels” , 12th ACM International Conference on Modeling, Analysis and Simulation of Wireless and Mobile Systems, MSWiM 2009, Tenerife, Spain, october 26-30, ISBN 978-1-60558-616-8, 392-395, 2009.
- [6] E. Simon, R. Legouable, M. Helard, “Impact of carrier phase jitter on IFDMA systems” , IEEE 17th International Symposium on Personal, Indoor and Mobile Radio Communications, PIMRC 2006, Helsinki, Finland, september 11-14, 5 pp., 2006.
- [5] E. Simon, L. Ros, “Adaptive multi-path channel estimation in CDMA based on prefiltering : combination with a linear equalizer” , 14th IST Mobile and Wireless Communications Summit, Dresden, Germany, june 19-23, 2005.
- [4] E. Simon, K. Raoof, L. Ros, “Synchronization over rapidly time-varying multi-path channels for CDMA downlink receiver in time-division mode” , 12th European Signal Processing Conference, EUSIPCO 2004, Vienna, Austria, september 6-10, 905-908, 2004.
- [3] E. Simon, K. Raoof, L. Ros, “Optimization of symbol timing recovery for multi-user DS-CDMA receivers” , IEEE International Conference on Acoustics, Speech and Signal Processing, ICASSP’03, Hong Kong, China, april 6-10, 4/604-607, 2003.
- [2] E. Simon, K. Raoof, L. Ros, “Optimization of a timing-error-detector used in RAKE receivers” , 3rd IEEE International Symposium on Signal Processing and Information Technology, ISSPIT’03, Darmstadt, Germany, december 14-17, 395-398, 2003.
- [1] E. Simon, K. Raoof, L. Ros, “Synchronisation conjointe rythme et phase en CDMA optimisée dans un contexte multi-utilisateur” , 19ème Colloque GRETSI sur le Traitement du Signal et des Images, Paris, France, septembre, 2003.