

André L. F. de Almeida

Department of Teleinformatics Engineering
Federal University of Ceara, Fortaleza, Brazil

Av. Mister Hull s/n, Campus do Pici, B. 722
CEP 60455-760 Fortaleza, CE, Brazil
andre@gtel.ufc.br

Updated on October 23, 2024

BIO SKETCH

André L. F. de Almeida is a Professor at the Teleinformatics Engineering Department of the Federal University of Ceara, Brazil. He received a double Ph.D. in Sciences and Teleinformatics Engineering from the University of Nice Sophia Antipolis, France, and the Federal University of Ceara, in 2007. He was awarded multiple times visiting professor positions at the University of Nice Sophia Antipolis, France (2012-2013; 2018-2019; 2022-2024). His research interests lie in signal processing for communications, sensor array and multichannel processing, multilinear algebra, and wireless communication networks. An essential part of his research has been devoted to tensor decompositions with applications to wireless communications. He has published over 270 papers in journals and conferences, 6 book chapters, and is co-inventor of 7 international patents.

Prof. Almeida is currently a Senior Area Editor for the IEEE Transactions on Signal Processing and a Senior Area Editor for the IEEE Signal Processing Letters. He is an elected member of the IEEE Signal Processing Society (SPS) Signal Processing Theory and Methods (SPTM) Technical Committee (2022-2024) and an elected member of the EURASIP Signal Processing for Multi-Sensor Systems Technical Area Committee (SPMuS TAC) (2016-2018 and 2019-2022), where he currently serves as the Vice-Chair. He has served as an Associate Editor for several journals, such as the IEEE Transactions on Signal Processing (2012-2014; 2014-2016), IEEE Signal Processing Letters (2016-2018; 2018-2020), and IEEE Transactions on Vehicular Technology (2020-2022). He also served on the IEEE SPS Sensor Array and Multichannel (SAM) Technical Committee for two terms (2015-2018 and 2018-2021). From 2022 to 2023, he served as the IEEE SPS Director-at-Large for Regions 7 & 9. In 2024, he was elected Chief Editor for the IEEE SPS SigPort (2025-2027).

Prof. Almeida has been involved in organizing and chairing several IEEE SPS conferences. In particular, he was a General Co-Chair of the 2017 IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP'2017), Technical Co-Chair of the IEEE GlobalSIP'2018 and IEEE GlobalSIP'2019 Symposia on Tensor Methods for Signal Processing and Machine Learning, Technical Co-Chair of the 11th IEEE Sensor Array and Multichannel Signal Processing Workshop (SAM'2020), and General Co-Chair of the 2023 IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP'2023). He is the Technical Co-Chair of the IEEE Sensor Array and Multichannel workshop (SAM'2026). He is a research fellow of the CNPq (the Brazilian National Council for Scientific and Technological Development).

Prof. Almeida is a co-recipient of the 2018 IET Communications Premium Best Paper Award (2018), a co-reipient of the 2022 IET Signal Processing Premium Best Paper Award (2022). He also co-received the Best Paper Award at the 19th IEEE International Conference on OFDM and Frequency Domain Techniques (2016), the WCNPS'2022 Best Paper Award, and Best Paper Awards at the 35th and 38th editions of the Brazilian Symposium of Telecommunications and Signal Processing (2020 and 2023). In 2018, Prof. Almeida was elected a Member of the Brazilian Academy of Sciences.

RESEARCH AREAS AND TOPICS

- Signal processing for communications
- Sensor array and multichannel processing
- Tensor decomposition and algorithms
- Tensor signal and information processing
- Blind/semi-blind estimation methods
- Intelligent reconfigurable surfaces
- MIMO systems/radar & mmWave systems
- Low-rank filtering methods and applications

EDUCATION

- Ph.D, Sciences, University of Nice Sophia Antipolis, Nice, France, 2007.
- M.Sc., Teleinformatics Engineering, Federal University of Ceará, Fortaleza, Brazil, 2003.
- B.Sc., Electrical Engineering, Federal University of Ceará, Fortaleza, Brazil, 2001.

PROFESSIONAL EXPERIENCE

- Professor, Teleinformatics Engineering, Federal University of Ceará (2010- present).
- Visiting Professor, University of Côte D'Azur, France (2012-2013, 2015, 2018-2019, 2022-2024).
Research Fellow of the CNPq (a Brazilian National Research Council) (2010-present).
- Post-doctoral Research Associate, I3S Laboratory, CNRS, France (2008-2009).
- Teaching Assistant, Electronics, Polytechnic School of Nice Sophia Antipolis (2007 -2008).
- Ph.D, Sciences, University of Nice Sophia Antipolis, Nice, France (2003- 2007).
- M.Sc., Teleinformatics Engineering, Federal University of Ceara, Fortaleza, Brazil (2002-2003).
- Engineering intern, Ericsson Research, Stockholm, Sweden (2002).

PROFESSIONAL SERVICE

Editorial activities

- Senior Area Editor, IEEE Transactions on Signal Processing (2024- present)
- Senior Area Editor, IEEE Signal Processing Letters (2020- present)
- Associate Editor, IEEE Transactions on Vehicular Technology (2020 - 2022)
- Associate Editor, IEEE Signal Processing Letters (2016-2020)
- Associate Editor, IEEE Transactions on Signal Processing (2012- 2016)
- Associate Editor, Frontiers in Communications and Networks Journal (2021-present)
- Associate Editor, *Traitement du Signal* (2014-2018)
- Associate Editor, Circuits, Systems & Signal Processing (2012- 2018)
- Associate Editor, Wireless Communications and Mobile Computing (2018-2020)
- Associate Editor, KSII Transactions on Internet and Information Systems (2012- 2014)
- Lead Guest Editor, EURASIP Journal on Advances in Signal Processing, special issue "Recent advances in Tensor-Based Signal and Image Processing" (2014, 2022)
- Guest Editor, Wireless Communications and Mobile Computing, special issue "Applications of Tensor Models in Wireless Communications and Mobile Computing", 2018

- Lead Guest Editor, Wireless Communications and Mobile Computing, special issue "Broadband Wireless Access for Rural and Remote Areas" of the Wireless Communications and Mobile Computing, 2019
- Guest Editor, EURASIP Journal on Advances in Signal Processing, special issue " Sparse/Low-rank Tensor Signal Processing for Communication and Radar Systems", 2021
- Guest Editor, Frontiers in Communications and Networks, special issue "Machine Learning and Artificial Intelligence for 5G and Beyond Technologies", 2021

Societies and Technical Committees Memberships

- IEEE SPS Director-at-Large, Regions 7 & 9 (2022-2023).
- Elected member of the IEEE Signal Processing Theory and Methods Technical Committee (SPTM-TC) (2021-2022)
- Elected member of the IEEE Sensor Array and Multichannel Technical Committee (SAM-TC) (2015-2018, 2018-2021)
- Vice-Chair of the EURASIP Signal Processing for Multi-Sensor Systems Technical Area Committee (SAT-SPMuS) (2022-2023)
- Elected member of the EURASIP Signal Processing for Multi-Sensor Systems Technical Area Committee (SAT-SPMuS) (2018-2021, 2022-2023)
- Associate member of the Big Data Special Interest Group (SIG) of IEEE SPS (2015-2018)
- IEEE Senior Member

Session Organizer and Chairing

- Technical Co-Chair of the IEEE Workshop on Sensor Array and Multichannel Processing (SAM 2025), Hangzhou, China, June 2025.
- General Co-chair of the Seventh IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP 2023), Costa Rica, December 2023.
- General Co-Chair of the IEEE Workshop on Communication Networks and Power System (WCNPS 2021), Brasilia, November 2021.
- Technical Co-Chair of the XXXIX Brazilian Symposium on Telecommunications and Signal Processing (SBrt 2021), Fortaleza, September 2021.
- Organizer of the special session "Tensor Signal and Information Processing" at ASILOMAR conference on Signals, Systems and Computer (ASILOMAR-SSC 2021)
- Technical Co-Chair of the IEEE Workshop on Sensor Array and Multichannel Processing (SAM 2020), virtual event, June 2020.
- Area Chair of the European Signal Processing Conference (EUSIPCO 2021), Dublin, Ireland, August 2021.
- Area Chair of the European Signal Processing Conference (EUSIPCO 2020), Amsterdam, The Netherlands, August 2020.
- Area Chair of the European Signal Processing Conference (EUSIPCO 2019), A Coruña, Spain, August 2019.
- Technical Co-Chair of the Symposium on "Tensor Methods for Signal Processing and Machine Learning" at IEEE GlobalSIP 2019
- Technical Co-Chair of the Symposium on "Tensor Methods for Signal Processing and Machine Learning" at IEEE GlobalSIP 2018
- Organizer of the special session "Tensor Models for Array Processing" at ASILOMAR conference on Signals, Systems and Computer (ASILOMAR-SSC 2019)
- Organizer of the special session "Tensor Based Signal and Information Processing" at ASILOMAR conference on Signals, Systems and Computer (ASILOMAR-SSC 2018)

- Co-organizer of the special session “Advanced Tensor Methods for Big Data Processing” at the European Signal Processing Conference (EUSIPCO 2017)
- General Co-chair of the Seventh IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP 2017), Curaçao
- Organizer and chair of the special session "Tensor signal processing" at the Ninth IEEE Sensor Array and Multichannel Processing Workshop (SAM 2016), Rio de Janeiro, Brazil, 2016.
- Organizer and chair of the special session "Massive MIMO systems" at the Sixth IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP 2015), Cancun, Mexico, 2015.
- Organizer and chair of the special session "Tensor-based signal processing" at the Sixth IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP 2015), Cancun, Mexico, 2015.
- Organizer and chair of the special session "Tensor-Based signal processing" at the Eight IEEE Sensor Array and Multichannel Processing Workshop (SAM 2014), La Coruña, Spain, 2014.
- Organizer and chair of the special session "Tensor-based methods for multi-sensor signal processing" at the Fifth IEEE International Workshop on Computational Advances in Multi-Sensor Adaptive Processing (CAMSAP 2013), Saint Martin, 2013.

Awards/Other

- 2019 IET Signal Processing Best Paper Award.
- 2018 IET Communications Premium Award.
- Best Paper Award at the 40th Brazilian Symposium of Telecommunications & Signal Processing, (SBrT 2023).
- Best Paper Award at IEEE WCNPS 2022.
- Best Paper Award at the 38th Brazilian Symposium of Telecommunications & Signal Processing, (SBrT 2021).
- Best Paper Award at the 19th IEEE International Conference on OFDM and Frequency Domain Techniques, August 2016.
- Elected Affiliate Member of the Brazilian Academy of Sciences (January 2018).
- Level-1D Research Fellow of the CNPq (Brazilian National Council for Scientific and Technological Development, Ministry of Science, Technology and Innovation).
- Reviewer for innumerable conferences (VTC 2006 Fall, ISWCS 2006, PIMRC 2006, 2007, VTC 2007 Spring, ISWCS 2007, VTC 2007 Fall, EUSIPCO 2008, SPAWC 2008, VTC 2008 Fall, VTC 2009 Spring, EUSIPCO 2009, EUSIPCO 2011, SSP 2011, EUSIPCO 2012, ISWCS 2012, FIE 2013, CAMSAP 2013, CAMSAP 2014, ICSPCS 2013, GLOBECOM 2013, SIRS 2014, ICSPCS 2014, SAM 2014, SAM 2016, ICASSP 2014, ICASSP 2015, ICASSP 2016, ICASSP 2017).

PHD THESES & ALUMNI

- Kenneth Brenner Benicio – Tensor Modeling and Algorithms for Wireless Communications and Radar Sensing (2023-present).
- Yuri Sales Ribeiro – Signal Processing for RIS-assisted MIMO Wireless Communication (2023-present).
- Gilderlan T. de Araújo – Channel Estimation for Intelligent Reflective Surfaces (2019-2024).
- Raimundo N. C. da Silva – Tensor Methods for Prediction in Large-Scale Time Series (2018-2023).
- Amarilton L. Magalhães – Multilinear Signaling for MIMO Communication Systems (2021-present).
- Mikus Grasis – Low-Rank Modeling and Multilinear Filtering (2018-2020). Co-supervised with Prof. Martin Haardt.

- Bruno Sokal – Tensor-Based Methods for MIMO Systems and Reflecting Surfaces (2017-2022). Co-supervised with Prof. Martin Haardt.
- Christoph Enneking – Multiple Access Interference in Satellite Navigation (2017-2020). Co-supervised with Dr. Felix Antreich.
- Emanuel Dario Rodrigues Sena – Distributed Optimization Approaches for Heterogeneous Wireless Networks (2015-2020).
- Lucas Nogueira Ribeiro – Tensor Methods for Large-Scale Signal Processing in Multi-Antenna Systems (2016-2019).
- Paulo Ricardo Barbosa Gomes – Tensor Methods for Array Processing and Channel Estimation in Wireless Communication Systems (2015-2018).
- Samuel Tumelero Valduga – Transceiver Design for Massive MIMO Systems: Approaches Based on Matrix Completion, Beam Selection, and Random Pilots (2015-2018).
- Leandro Ronchini Ximenes – Tensor-based MIMO Relaying Communication Systems. Co-supervised with Dr. Gérard Favier.
- Alex Pereira da Silva – Techniques tensorielles pour le traitement du signal: algorithmes pour la décomposition canonique polyadique (2013-2016). Co-supervised with Dr. Pierre Comon.
- Michele Nazareth da Costa – Tensor Space-Time Coding for MIMO Wireless Communication Systems (2011-2014), defended in 2013 at I3S. Co-supervised with Dr. Gérard Favier.
- Manuel Binelo – Analysis and Conception of Robust MIMO Systems for Small Size Mobile Terminals (2010-2013), defended in 2013 at UFC. Co-supervised with Dr. Rodrigo Cavalcanti.

POSTDOCS

- Gilderlan T. de Araújo – Tensor Signal Processing for Reconfigurable Surfaces with Applications to Communications and Sensing, Federal University of Ceará (2024-present).
- Paulo Gomes – “Transceiver Design for Integrated Communications and Sensing”, Federal University of Ceará (2024-present).
- Bruno Sokal – “Tensor Signal Processing for RIS-Assisted MIMO Wireless Systems”, Federal University of Ceará (2022-2024).
- Fazal-E Asim – “Structured Tensor-Based Methods for Parameter Estimation in 5G MIMO Systems”, Federal University of Ceará (2021-2023).
- Francisco Hugo Costa Neto – “MIMO Systems Assisted by Intelligent Reflecting Surfaces”, Federal University of Ceará (2020-2021).
- Paulo R. B. Gomes – “Tensor-Based Channel Estimation for Intelligent Reflecting Surfaces Assisted MIMO”, Federal University of Ceará (2020-2021).
- Daniel C. Araújo – “Machine Learning for Beam Management in 5G Networks”, Federal University of Ceará (2018-2019).
- Khaled N. R. Ardah – “Hybrid Architectures for mmWave MIMO Systems”, Federal University of Ceará (2018).
- Leandro R. Ximenes – “Tensor-based Cooperative MIMO Communications”, Federal University of Ceará (2015-2016).

PUBLICATIONS

Journal Papers

- [110] A. L. Magalhães, A. L. F. de Almeida, “Semi-Blind Receivers for Hybrid Reflecting and Sensing RIS,” submitted, 2024.
- [109] Y. S. Ribeiro, B. Makki, A. L. F. de Almeida, F. Asim, G. Fodor, “Mobility Management in Integrated Sensing and Communications Networks,” submitted, 2024.

- [108] S. Ahmadi, N. Rezaeian, C. F. Caiafa, A. L. F. de Almeida, “Efficient Algorithms for Low Tubal Rank Tensor Approximation with Applications to Image Compression, Super-Resolution, and Deep Learning,” submitted, 2024.
- [107] A. L. F. de Almeida, B. Sokal, H. Li, B., Clerckx, “Channel Estimation for Beyond Diagonal RIS via Tensor Decomposition,” submitted, 2024.
- [106] S. Ahmadi, A. L. F. de Almeida, “Randomized algorithms for Kronecker tensor decomposition and applications,” submitted, 2024.
- [105] Y. Znyed, A. L. F. de Almeida, “A Stochastic Algorithm for the Paratuck-2 decomposition”, submitted, 2024.
- [104] M. Dehghan, J. Henrique de M. Goulart, A. L. F. de Almeida, “Low-Rank Multilinear Filtering,” *Digital Signal Processing*, vol. 153, pp. 104646, 2024.
- [103] Two-Dimensional Channel Parameter Estimation for IRS-Assisted Networks, submitted, 2024.
- [102] F. E. Asim, A. L. F. de Almeida, B. Sokal, B. Makki, G. Fodor, “Tensor-Based Channel Estimation for RIS-Assisted Communications in THz Channels,” submitted, 2023.
- [101] Y. S. Ribeiro, A. L. F. de Almeida, F. E. Asim, B. Makki, G. Fodor, “Low-Complexity Joint Active and Passive Beamforming Design for IRS-Assisted MIMO”, *IEEE Wireless Communications Letters*, vol. 13, no. 3, pp. 607-611, 2024.
- [100] K. B. Benício, A. L. F. de Almeida, B. Sokal, F. E. Asim, B. Makki, G. Fodor, “Tensor-Based Channel Estimation and Data-Aided Tracking in IRS-Assisted MIMO Systems” *IEEE Wireless Communications Letters*, vol. 13, no. 2, pp. 333-337, 2024.
- [99] B. Sokal, P. R. B. Gomes, A. L. F. de Almeida, B. Makki, G. Fodor, “Reducing the Control Overhead of Intelligent Reconfigurable Surfaces Via a Tensor-Based Low-Rank Factorization Approach”, *IEEE Transactions on Wireless Communications*, vol. 22, no. 10, pp. 6578-6593, Oct. 2023.
- [98] M. Giraud, V. Itier, R. Boyer, Y. Znyed, A. L. F. de Almeida, “Tucker Decomposition Based on a Tensor Train of Coupled and Constrained CP Cores”, *IEEE Signal Processing Letters*, vol. 30, pp. 758-762, 2023.
- [97] G. T. Araújo, A. L. F. de Almeida, R. Boyer, “Semi-Blind Joint Channel and Symbol Estimation for Intelligent Surface Assisted MIMO Systems”, in *IEEE Transactions on Signal Processing*, vol. 71, pp. 1184-1199, 2023.
- [96] H. Zheng, C. Zhou, Z. Shi, A. L. F. de Almeida, Y. Gu, “Coarray Tensor Completion for DOA Estimation”, in *IEEE Transactions on Aerospace and Electronic Systems*, vol. 59, no. 5, pp. 5472-5486, Oct. 2023.
- [95] M. F. K. B. Couras, P. H. U. de Pinho, G. Favier, V. Zarzoso, A. L. F. de Almeida, J. P. J. da Costa, “Semi-Blind Receivers Based on a Coupled Nested Tucker-PARAFAC Model for Dual-Polarized MIMO Systems using Combined TST and MSMKron Codings”, *Digital Signal Processing*, vol. 137, no. 15, June 2023.
- [94] P. R. B. Gomes, G. T. Araújo, A. L. F. de Almeida, B. Makki, G. Fodor, “Channel Estimation in RIS-Assisted MIMO Systems Operating Under Imperfections”, *IEEE Transactions on Vehicular Technology*, doi: 10.1109/TVT.2023.327980, 2023.
- [93] Fazal-E-Asim, F. Antreich, C. C. Cavalcante, A. L. F. de Almeida, J. A. Nossek, “Efficient Hybrid A/D Beamforming for Millimeter-Wave Systems Using Butler Matrices”, in *IEEE Transactions on Wireless Communications*, vol. 22, no. 2, pp. 1001-1013, Feb. 2023.

- [92] P. H. U. de Pinho, M. F. K. B. Couras, G. Favier, A. L. F. de Almeida, J. P. J. da Costa, "Semi-Blind Receivers for Two-Hop MIMO Relay Systems with a Combined TSTF-MSMKron Coding", *Sensors*, vol. 23, no. 13, doi.org/10.3390/s23135963, 2023.
- [91] L. Khamidullina, A. L. F. de Almeida, M. Haardt, "Multilinear Generalized Singular Value Decomposition (ML-GSVD) and its Application to Multiuser MIMO Systems. *IEEE Transactions on Signal Processing*, vol. 70, pp. 2783-2797, 2022.
- [90] H. Zheng, C. Zhou, Z. Shi, A. L. F. de Almeida, "SubTTD: DOA Estimation via Sub-Nyquist Tensor Train Decomposition," *IEEE Signal Processing Letters*, vol. 29, pp. 1978-1982, 2022.
- [89] G. T. Araújo, A. L. F. de Almeida, B. Makki, G. Fodor, "Semi-Blind Joint Channel and Symbol Estimation in IRS-Assisted Multiuser MIMO Networks, *IEEE Wireless Communications Letters*, vol. 11, pp. 1553-1557, 2022.
- [88] R. P. Antonioli, I. M. Braga Jr., G. Fodor, Y. C. B. Silva, A. L. F. de Almeida, W. C. Freitas Jr, "On the Energy Efficiency of Cell-Free Systems with Limited Fronthauls: Is Coherent Transmission Always the Best Alternative", in *IEEE Transactions on Wireless Communications*, vol. 21, no. 10, pp. 8729-8743, Oct. 2022.
- [87] C. Enneking, F. Antreich, A. L. F. de Almeida, "Randomized Spectral Separation Coefficient for Short Code Acquisition Performance Evaluation", *IEEE Transactions on Aerospace and Electronic Systems*, vol. 58, no. 3, pp. 1593-1608, June 2022.
- [86] Fazal-E-Asim, A. L. F. de Almeida, F. Antreich, M. Haardt, C. C. Cavalcante, "Kronecker Product Based Space-Time Block Codes", *IEEE Wireless Communications Letters*, vol. 11, no. 2, pp. 386-390, 2022.
- [85] B. Sokal, K. Naskovska, A. L. F. de Almeida, M. Haardt, "Using tensor contractions to derive the structure of slice-wise multiplications of tensors with applications to semi-blind MIMO OFDM systems", *EURASIP Journal on Advances in Signal Processing*, vol. 2022, pp. 1-26, 2022.
- [84] F. H. Costa Neto, D. C. Araújo, M. P. Mota, T. F. Maciel and A. L. F. de Almeida, "Uplink Power Control Framework Based on Reinforcement Learning for 5G Networks," in *IEEE Transactions on Vehicular Technology*, vol. 70, no. 6, pp. 5734-5748, June 2021.
- [83] K. Ardah, S. Gherekhloo, A. L. F. de Almeida and M. Haardt, "TRICE: A Channel Estimation Framework for RIS-Aided Millimeter-Wave MIMO Systems," in *IEEE Signal Processing Letters*, vol. 28, pp. 513-517, 2021.
- [82] S. Miron, Y. Zniyed, R. Boyer, A. L. F. de Almeida, G. Favier, D. Brie, Pierre Comon "Tensor methods for multisensor signal processing ", *IET Signal Processing*, vol. 14, no. 10, pp. 693-709, 2020.
- [81] X. Han, X. Zhao, A. L. F. de Almeida, W. C. Freitas and W. Bai, "Enhanced Tensor-Based Joint Channel and Symbol Estimation in Dual-Hop MIMO Relaying Systems," in *IEEE Communications Letters*, vol. 25, no. 5, pp. 1655-1659, May 2021.
- [80] G. T. de Araújo, A. L. F. de Almeida and R. Boyer, "Channel Estimation for Intelligent Reflecting Surface Assisted MIMO Systems: A Tensor Modeling Approach," in *IEEE Journal of Selected Topics in Signal Processing*, vol. 15, no. 3, pp. 789-802, April 2021.
- [79] B. Sokal, P. R. B. Gomes, A. L. F. d. Almeida and M. Haardt, "Tensor-Based Receiver for Joint Channel, Data, and Phase-Noise Estimation in MIMO-OFDM Systems," in *IEEE Journal of Selected Topics in Signal Processing*, vol. 15, no. 3, pp. 803-815, April 2021.

- [78] Fazal-E-Asim, F. Antreich, C. C. Cavalcante, A. L. F. de Almeida and J. A. Nossek, "Two-Dimensional Channel Parameter Estimation for Millimeter-Wave Systems Using Butler Matrices," in *IEEE Transactions on Wireless Communications*, vol. 20, no. 4, pp. 2670-2684, April 2021.
- [77] Han Xi, A. L. F. de Almeida, W. C. Freitas Jr., Yingchun Zhou, "A Semiblind Uni-ALS Receiver for a Two-Way MIMO Relaying System Based on the PARATUCK2 Model", *Digital Signal Processing*, vol. 110, March 2021, 102916.
- [76] A. M. Pessoa, B. Sokal, C. F. M. Silva, T. F. Maciel, A. L. F. de Almeida, F. R. P. Cavalcanti, "A CDL-based Channel Model with Dual-Polarized Antennas for 5G MIMO Systems in Rural Remote Areas", *IEEE Access*, vol. 8, pp. 163366-163379, 2020.
- [75] F. Asim, A. L. F. de Almeida, M. Haardt, C. C. Cavalcante, J. A. Nossek, "Rank-one detector for Kronecker-structured constant modulus constellations", *IEEE Signal Processing Letters*, vol. 27, pp. 1420-1424, 2020.
- [74] F. E. Asim, J. A. Nossek, C. C. Cavalcante, F. Antreich, A. L. F. de Almeida, "Channel parameter estimation for millimeter-wave MIMO systems with hybrid beamforming", *Signal Processing*, vol. 76, pp. 107715, Nov. 2020.
- [73] Y. Zniyed, R. Boyer, A. L. F. de Almeida, G. Favier, "Tensor train representation of massive MIMO channels using the joint dimensionality reduction and factor retrieval (JIRAFE) method", *Signal Processing*, vol. 171, June 2020.
- [72] Y. Zniyed, R. Boyer, A.L.F. de Almeida, G. Favier, "A TT-based hierarchical framework for decomposing high-order tensors", *SIAM Journal on Scientific Computing*, vol. 42, no. 2, pp. A822–A848, 2020.
- [71] Y. Zniyed, R. Boyer, A.L.F. de Almeida, G. Favier, "High-order tensor factorization via trains of coupled third-order CP and Tucker decompositions", *Linear Algebra and its Applications*, vol. 588, no. 1, pp.304-337, March 2020.
- [70] C. C. R. Garcez, D. V. de Lima, R. K. Miranda, F. L. L. de Mendonça, J. P. C. L. da Costa, A. L. F. de Almeida, R. T. de Sousa Jr., "Tensor-based subspace tracking for time-delay estimation in GNSS", *Sensors*, vol. 19, no. 23, Dec. 2019, pp. 5076.
- [69] L. N. Ribeiro, S. Schwarz, A. L. F. de Almeida, "Double-sided massive MIMO transceivers for mmWave communications", *IEEE Access*, vol. 7, pp. 157667-157679, 2019.
- [68] K. Ardah, G. Fodor, Y. C. B Silva, W. C. Freitas Jr., A. L. F. de Almeida, "Hybrid analog-digital beamforming design for SE and EE maximization in massive MIMO networks", *IEEE Transactions on Vehicular Technology*, vol. 69, no. 1, pp. 377-389, Jan. 2020.
- [67] W. C. Freitas Jr., G. Favier, A. L. F. de Almeida, "Tensor-based joint channel and symbol estimation for two-way MIMO relaying systems", *IEEE Signal Processing Letters*, vol. 26, p. 227-231, 2019.
- [66] L. N. Ribeiro, A. L. F. de Almeida, J. C. M. MOTA, "Separable linearly constrained minimum variance beamformers", *Signal Processing*, vol. 158, pp. 15-25, 2019.
- [65] P. R. B. Gomes, J. P. C. L. da Costa, A. L. F. de Almeida, "Tensor-based multiple denoising via successive spatial smoothing, low-rank approximation and reconstruction for R-D sensor array processing", *Digital Signal Processing*, vol. 89, pp. 1-7, 2019.

- [64] L. N. Ribeiro, A. L. F. de Almeida, J. A. Nossek, J. C. M. Mota, "Low-complexity separable beamformers for massive antenna array systems", *IET Signal Processing*, vol. 13, pp. 434-442, 2019.
- [63] P. R. B. Gomes, A. L. F. de Almeida, J. P. C. L. da Costa, R. T. de Sousa Jr., "A nested-PARAFAC based approach for target localization in bistatic MIMO radar systems", *Digital Signal Processing*, vol. 89, pp. 40-48, 2019.
- [62] H. Xi, A. L. F. de Almeida, A. Liu, W. Bai, "Semi-blind receiver for two-way MIMO relaying systems based on joint channel and symbol estimation", *IET Communications*, vol. 13, pp. 1090-1094, 2019.
- [61] D. C. Araújo, A. L. F. de ALMEIDA, J. P. C. L. da Costa, R. T. de Sousa Jr., "Tensor-based channel estimation for massive MIMO-OFDM systems", *IEEE Access*, vol. 7, pp. 42133-42147, 2019.
- [60] Y. Znyed, R. Boyer, A. L. F. de Almeida, G. Favier, "Multidimensional harmonic retrieval based on Vandermonde tensor train", *Signal Processing*, vol. 163, pp. 75-86, 2019.
- [59] M. T. Oliveira, R. K. Miranda, J. P. C. L. da Costa, A. L. F. de Almeida, R. T. de Sousa Jr., "Low cost antenna array based drone tracking device for outdoor environments", *Wireless Communications & Mobile Computing*, vol. 2019, pp. 1-14, 2019.
- [58] P. R. B. Gomes, A. L. F. de Almeida, J. P. C. L. da Costa, R. T. de Sousa Jr., "Joint DL and UL channel estimation for millimeter wave MIMO systems using tensor modeling", *Wireless Communications & Mobile Computing*, vol. 2019, pp. 1-13, 2019.
- [57] B. Sokal, A. L. F. de Almeida, M. Haardt, "Semi-blind receivers for MIMO multi-relaying systems via rank-one tensor approximations", *Signal Processing*, vol. 166, pp. 107254, 2019.
- [56] L. N. Ribeiro, S. Schwarz, M. Rupp, A. L. F. de Almeida, "Energy efficiency of mmWave massive MIMO precoding with low-resolution DACs", *IEEE Journal of Selected Topics in Signal Processing*, vol. 12, pp. 298-312, 2018.
- [55] W. C. Freitas Jr., G. Favier, A. L. F. de Almeida, "Generalized Khatri-Rao and Kronecker space-time coding for MIMO relay systems with closed-form semi-blind receivers", *Signal Processing*, vol. 151, pp. 19-31, 2018.
- [54] S. T. Valduga, A. L. F. de Almeida, C. F. M. Silva, I. M. Guerreiro, D. C. Araújo, "A framework to channel feedback and reconstruction using matrix completion in massive MIMO systems", *Journal of Communication and Information Systems (JCIS)*, vol. 33, pp. 78-91, 2018.
- [53] S. T. Valduga, L. Deneire, R. Aparicio-Pardo, A. L. F. de Almeida, T. F. Maciel, J. C. M. Mota, "Low-complexity heuristics to beam selection and rate adaptation in sparse massive MIMO systems", *Transactions on Emerging Telecommunications Technologies*, vol. 29, pp. 3459, 2018.
- [52] E. D. R. Sena, A. L. F. de Almeida, "Algebra multilinear aplicada ao reconhecimento facial", *Learning and Nonlinear Models*, vol. 15, pp. 1-55, 2018.
- [51] R. K. Miranda, J. P. C. L. da Costa, B. Guo, A. L. F. de Almeida, G. del Galdo, R. T. de Sousa Jr., "Low-complexity and high-accuracy semi-blind joint channel and symbol estimation for massive MIMO-OFDM", *Circuits, Systems and Signal Processing*, vol. 2019, pp. 1114, 2018.
- [50] W. C. Freitas Jr., G. Favier, A. L. F. de Almeida, "Sequential closed-form semi-blind receiver for space-time coded multi-hop relaying systems", *IEEE Signal Processing Letters*, vol. 24, no. 12, p. 1773-1777, 2017.

- [49] S. T. Valduga, A. L. F. de Almeida, R. Machado A. P. Legg, M. Loiola, D. I. Alves, "Codebook design and performance analysis of quantized beamforming under perfect and imperfect channel state information", *Journal of Communication and Information Systems (JCIS)*, vol. 32, pp. 161-171, 2017.
- [48] G. T. de Araújo, A. L. F. de Almeida, "Closed-form channel estimation for MIMO space-time coded systems using a fourth-order tensor-based receiver", *Circuits, Systems and Signal Processing*, vol. 37, pp. 1343-1357, 2017.
- [47] P. R. B. Gomes, A. L. F. de ALMEIDA, J. P. C. L da Costa, G. del Galdo, "Tensor-based methods for blind spatial signature estimation under arbitrary and unknown source covariance structure", *Digital Signal Processing*, vol. 62, pp. 197-210, 2017.
- [46] R. K. Miranda, J. P. C. L. da Costa, F. Roemer, L. R. A. X. Meneses, G. del Galdo, A. L. F. de Almeida, "Low complexity performance assessment of a sensor array via unscented transformation. *Digital Signal Processing*, pp. 190-198, 2017.
- [45] P. R. B. Gomes, A. L. F. de Almeida, J. P. C. L. da Costa, J. C. M. Mota, D. V. Lima, G. del Galdo, "Tensor-based methods for blind spatial signature estimation in multidimensional sensor arrays", *International Journal of Antennas and Propagation*, vol. 2017, pp. 1-11, 2017.
- [44] L. R. Ximenes, G. Favier, A. L. F. de Almeida, "Closed-form semi-blind receiver for MIMO relay systems using double Khatri-Rao space-time coding", *IEEE Signal Processing Letters*, vol. 23, pp. 316-320, 2016.
- [43] C. A R Fernandes, G. Favier, A. L. F. de Almeida, "Nested Tucker tensor decomposition with application to MIMO relay systems using tensor space-time coding (TSTC)", *Signal Processing*, vol. 128, pp. 318-331, 2016.
- [42] A. P. Silva, P. Comon, A. L. F. de Almeida, "A finite algorithm to compute rank-1 tensor approximations", *IEEE Signal Processing Letters*, vol. 23, no. 7, p. 959-963, 2016.
- [41] D. C. Araújo, T. Maksymyuk, A. L. F. de Almeida, T. F. Maciel, J. C. M. Mota, M. Jo, "Massive MIMO: survey and future research topics. *IET Communications*, vol. 1, pp. 1-26, 2016.
- [40] A. P. Silva, P. Comon, A. L. F. de Almeida, "On the reduction of multivariate quadratic systems to best rank-1 approximation of three-way tensors", *Applied Mathematics Letters*, vol. 61, pp. 9-15, 2016.
- [39] A. O. Nunes, T. E. V. Silva, J. C. M. Mota, A. L. F. de Almeida, W. B. Andriola, "Developing an instrument for assessment of academic management in engineering courses", *IEEE Latin America Transactions*, vol. 13, pp. 263-271, 2015.
- [38] H. Xi, A. L. F. de Almeida, "Multiuser receiver for joint symbol/channel estimation in dual-hop relaying systems, *Wireless Personal Communications*, vol. 83, pp. 17-33, 2015.
- [37] L. R. Ximenes, G. Favier, A. L. F. de Almeida, "Semi-blind receivers for non-regenerative cooperative MIMO communications based on nested PARAFAC modeling, *IEEE Transactions on Signal Processing*, vol. 63, pp. 4985-4998, 2015.
- [36] A. O. Nunes, T. E. V. Silva, J. C. M. Mota, A. L. F. de Almeida, W. B. Andriola, "Validation of the academic management evaluation instrument based on principal component analysis for engineering and technological courses", *Ingenieria e Investigacion*, vol. 35, pp. 96-102, 2015.
- [35] I. V. Cavalcante, A. L. F. de Almeida, M. Haardt, "Joint channel estimation for three-hop MIMO relaying systems", *IEEE Signal Processing Letters*, vol. 22, pp. 2430-2434, 2015.

- [34] L.-T. Huang, A. L. F. de Almeida, H. C. So, "Target estimation in bistatic MIMO radar via tensor completion", *Signal Processing*, vol. 120, p. 654-659, 2016.
- [33] G. Favier, A. L. F. de Almeida, "Overview of constrained PARAFAC models", *EURASIP Journal on Advances in Signal Processing*, v. 2014, p. 142, 2014.
- [32] M. Jo., T. MakSymyuk, R. L. Batista, T. F. Maciel, A. L. F. de Almeida, M. Klymash, "A survey of converging solutions for heterogeneous mobile networks", *IEEE Wireless Communications*, vol. 21, p. 54-62, 2014.
- [31] H. Xi, A. L. F. de Almeida, "Channel estimation for MIMO multi-relay systems using a tensor approach", *EURASIP Journal on Advances in Signal Processing*, vol. 2014, p. 163, 2014.
- [30] C. A. R. Fernandes, D. B. da Costa, A. L. F. de Almeida, "Performance analysis of cooperative amplify-and-forward orthogonal frequency division multiplexing systems with power amplifier non-linearity", *IET Communications*, vol. 8, p. 3223-3233, 2014.
- [29] G. Favier, A. L. F. de Almeida, "Tensor space-time-frequency coding with semi-blind receivers for MIMO wireless communication systems", *IEEE Transactions on Signal Processing*, vol. 62, no. 22, pp. 5987-6002, 2014.
- [28] L. R. Ximenes, G. Favier, A. L. F. de Almeida, Y. C. B. Silva, "PARAFAC-PARATUCK semi-blind receivers for two-hop cooperative MIMO relay systems", *IEEE Transactions on Signal Processing*, vol. 62, no. 14, pp. 3604-3615, 2014.
- [27] L. R. Ximenes, A. L. F. de Almeida, "Directional estimation of block-fading MIMO channels using spherical harmonics expansion and tensor analysis", *Circuits Systems and Signal Processing*, vol. 2014, p. 1-25, 2014.
- [26] N. Ferdinand, D. B. da Costa, A. L. F. de Almeida, M. Latva-Aho, "Physical layer secrecy performance of TAS wiretap channels with correlated main and eavesdropper channels", *IEEE Wireless Communications Letters*, vol. 3, pp. 86-89, 2014.
- [25] W. C. Freitas Jr., A. L. F. de Almeida, J. P. C. L. da Costa, "Blind joint channel estimation and data detection for precoded multi-layered space-frequency MIMO schemes", *Circuits Systems and Signal Processing*, vol. 2013, pp. 1-15, 2013.
- [24] K. Liu, J. P. C. L. da Costa, H. C. So, A. L. F. de Almeida, "Semi-blind receivers for joint symbol and channel estimation in space-time-frequency MIMO-OFDM systems", *IEEE Transactions on Signal Processing*, vol. 61, no. 21, pp. 5444-5457, 2013.
- [23] A. L. F. de Almeida, C. A. R. Fernandes, D. B. da Costa, "Multiuser detection for uplink DS-SS amplify-and-forward relaying systems", *IEEE Signal Processing Letters*, vol. 20, no. 7, pp. 697-700, 2013.
- [22] A. L. F. de Almeida, G. Favier, "Double Khatri-Rao space-time-frequency coding for MIMO systems with semi-blind receiver based on two nested PARAFAC models", *IEEE Signal Processing Letters*, vol. 20, no.5, pp. 471-474, 2013.
- [21] A. L. F. de Almeida, G. Favier, L. R. Ximenes, "Space-time-frequency (STF) MIMO communication systems based on a generalized PARATUCK2 model", *IEEE Transactions on Signal Processing*, vol. 61, n. 8, pp. 1895-1909, 2013.
- [20] A. L. F. de Almeida, G. Favier, "Unified tensor model for space-frequency spreading-multiplexing (SFSM) MIMO communication systems", *EURASIP Journal on Advances in Signal Processing*, vol. 2013, no. 48, March 2013.

- [19] A. L. F. de Almeida, I. L. J. da Silva, "Closed-loop MIMO transceiver with space-time multilayer transmit selection", *Wireless Communications and Mobile Computing*, vol. 2012, no. 6, June 2012.
- [18] A. L. F. de Almeida, X. Luciani, P. Comon, A. W. Stegeman, "CONFAC decomposition approach to blind identification of underdetermined mixtures based on generating function derivatives", *IEEE Transactions on Signal Processing*, vol. 60, n. 11, pp. 5698-5713, November 2012.
- [17] C. A. R. Fernandes, A. L. F. de Almeida, D. B. da Costa, "Unified tensor modeling for blind receivers in multiuser uplink cooperative systems", *IEEE Signal Processing Letters*, vol. 19, pp. 247-250, May 2012.
- [16] G. Favier, T. Bouilloc, A. L. F. de Almeida, "Blind constrained block-Tucker2 receiver for multiuser SIMO NL-CDMA communication systems", *Signal Processing*, vol. 92, no. 7, pp. 1624-1636, July 2012.
- [15] M. N. da Costa, G. Favier, A. L. F. de Almeida, J. M. T. Romano, "Tensor space-time (TST) coding for MIMO wireless communication system", *Signal Processing*, vol. 92, no. 4, pp. 1079-1092, April 2012.
- [14] W. C. Freitas Jr., D. C. Moreira, C. C. Cavalcante, A. L. F. de Almeida, "Backward recursion in layered space-time non-linear interference cancellation detectors", *Journal of Communication and Information Systems*, vol. 26, pp. 30-34, 2012.
- [13] X. Luciani, A. L. F. de Almeida, P. Comon, "Blind identification of underdetermined mixtures based on the characteristic function: the complex case", *IEEE Transactions on Signal Processing*, vol. 59, no. 2, pp. 540-553, Feb. 2011.
- [12] M. Binelo, A. L. F. de Almeida, F. R. P. Cavalcanti, "MIMO array capacity optimization using a genetic algorithm", *IEEE Transactions on Vehicular Technology*, vol. 60, p. 2471-2481, July 2011.
- [11] A. Stegeman, A. L. F. de Almeida, "Uniqueness conditions for constrained three-way factor decompositions with linearly dependent loadings", *SIAM Journal on Matrix Analysis and Applications*, vol. 31, no. 3, pp. 865-876, Aug. 2009.
- [10] P. Comon, X. Luciani, A. L. F. de Almeida, "Tensor decompositions, alternating least squares and other tales", *Journal of Chemometrics*, vol. 23, no.7-8, pp. 393-405, Aug. 2009.
- [9] A. L. F. de Almeida, G. Favier, J. C.M. Mota, "Constrained Tucker-3 model for blind beamforming", *Signal Processing*, vol. 89, no. 6, pp. 1240-1244, June 2009.
- [8] A. L. F. de Almeida, G. Favier, J. C.M. Mota, "Space time spreading multiplexing for MIMO wireless communication systems using the PARATUCK-2 tensor model", *Signal Processing*, vol. 89, no. 11, pp. 2103-2116, Nov 2009.
- [7] A. L. F. de Almeida, G. Favier, J. C.M. Mota, "Multiuser MIMO system using block space time spreading and tensor modeling", *Signal Processing*, vol. 88, no. 10, pp. 2388-2402, Oct. 2008.
- [6] A. L. F. de Almeida, G. Favier, J. C.M. Mota, "Space time spreading MIMO-CDMA downlink systems using constrained tensor modeling", *Signal Processing*, vol. 88, no. 10, pp. 2403-2416, Oct. 2008.
- [5] A. L. F. de Almeida, G. Favier, J. C.M. Mota, "A constrained factor decomposition with application to MIMO antenna systems", *IEEE Transactions on Signal Processing*, vol. 56, no. 6, pp. 2429-2442, June 2008.
- [4] A. L. F. de Almeida, G. Favier, J. C.M. Mota, "Constrained tensor modeling approach to blind multiple-antenna CDMA schemes", *IEEE Transactions on Signal Processing*, vol. 56, no. 6, pp. 2417-2428, June 2008.

[3] A. L. F. de Almeida, G. Favier, J. C.M. Mota, "PARAFAC-based unified tensor modeling for wireless communication systems with application to blind multiuser equalization", *Signal Processing*, vol. 87, no. 2, pp. 337-351, Feb. 2007.

[2] W. C. Freitas Jr., A. L. F. de Almeida, J. C. M. Mota, F. R. P. Cavalcanti, R. L. de Lacerda Neto, "Performance of MIMO antenna systems with hybrids of transmit diversity and spatial multiplexing using soft-output decoding", *Lecture Notes in Computer Science*, vol. 3124, pp. 28-37, 2004.

[1] A. L. F. de Almeida, F. R. P. Cavalcanti, J. C. M. Mota, C. E. R. Fernandes, "Decoupled space-time processing for CCI/ISI suppression of in mobile communication systems", *Journal of Communication and Information Systems*, vol. 1, p. 1-6, 2003.

Patents

[6] B. Sokal, P. R. B. Gomes, A. L. F. de Almeida, G. Fodor, B. Makki, "Approaches for control of a radio reflector", US. Patent, United States Patent and Trademark Office, no. WO2023165671A1, Sep. 7, 2023.

[5] B. Makki, G. Fodor, A. L. F. de Almeida, F. H. Costa Neto, "Configuring an intelligent surface (IRS)", US. Patent, United States Patent and Trademark Office, no. WO2023099016A1, June 8, 2023.

[4] B. Makki, J. Li, G. Fodor, A. L. F. de Almeida, F. H. Costa Neto, "Communication between radio transceiver devices via a meta-surface", US. Patent, United States Patent and Trademark Office, no. WO2023099016A1, April 27, 2023.

[3] Y. S. Ribeiro, F. Assim, A. L. F. de Almeida, B. Makki, G. Fodor, "Horizontal and vertical beamforming design for IRS-assisted communications", United States Patent and Trademark Office, P107053WO01, March 3, 2022.

[2] F. E. Asim, B. Sokal, A. L. F. de Almeida, G. Fodor, B. Makki, "Transmission and Reception of a Two-Dimensional Pilot Signal", US. Patent, United States Patent and Trademark Office, P106085WO01, November 2, 2022.

[1] I. L. J. Da Silva, R. Baldemair, F. R. P. Cavalcanti, A. L. F. de Almeida, "Tensor-based receiver for separating component signals in a composite signal", US. Patent, United States Patent and Trademark Office, no. US8369468B2, Feb. 5, 2013.

Book Chapters

[7] Y. Zniyed, O. Karmouda, J. Boulanger, R. Boyer, A. L. F. de Almeida, et al., "Structured Tensor-Train Decomposition for Speeding-Up Kernel-Based Learning", Yipeng Liu, *Tensors for Data Processing*, Chapter 15, Elsevier, in Press, *Tensors for Data Processing*.

[6] A. L. F. de Almeida, G. Favier, J. P. C. L. da Costa, "Overview of tensor decompositions with applications in communications", In: R.F. Coelho, V.H. Nascimento, R. L. de Queiroz, J.M.T. Romano, C.C. Cavalcante. (Org.). *Signals and Images: Advances and Results in Speech, Estimation, Compression, Recognition, Filtering, and Processing*. 1ed.: CRC Press, 2015, v. 1, p. 325-350.

[5] M. Binelo, A. L. F. de Almeida, F. R. P. Cavalcanti, "Genetic algorithms for the optimization of MIMO antenna arrays", In: CAVALCANTI. F. R. P.. (Org.). *Resource Allocation and MIMO for 4G and Beyond*. 1ed.: Springer, 2013, v. 1, p. 1-531.

- [4] W. C. Freitas Jr., A. L. F. de Almeida, J. P. C. L. da Costa, K. Liu, H. C. So, "Multiantenna multicarrier transceiver architectures", In: CAVALCANTI, F. R. P.. (Org.). Resource Allocation and MIMO for 4G and Beyond Resource Allocation and MIMO for 4G and Beyond. 1ed.: Springer, 2013, v. 1, p. 1-531.
- [3] A. L. F. de Almeida, G. Favier, J. C.M. Mota, "Multiuser MIMO systems using STFMA PARAFAC tensor modeling", In: Cavalcanti, F. R. P., Andersson, S. N. (Org.), Optimizing Wireless Communication Systems, 1 ed. New York: Springer, 2009, v. 1, p. 421-457.
- [2] I. L. J. Silva, A. L. F. de Almeida, F. R. P. Cavalcanti, G. Favier, "MIMO transceiver design for enhanced performance under limited feedback", In: Cavalcanti, F. R. P., Andersson, S. N.. (Org.), Optimizing Wireless Communication Systems, 1 ed. New York: Springer, 2009, v. 1, pp. 463-505.
- [1] A. L. F. de Almeida, G. Favier, J. C.M. Mota, "Tensor decompositions and applications to wireless communications systems", In: Cavalcante, C. C. ; Colares, R. F.; Barbosa, P. C. , (Org.), Telecommunications: Advances and Trends in Transmission, Networking and Applications, Fortaleza, University of Fortaleza Press, 2006, pp. 57-82.

Conference Papers

- [178] A. L. Magalhães, A. L. F. de Almeida, L. Deneire, "Closed-Form Receivers for MIMO Communications Assisted by Hybrid Sensing and Reflecting RIS," 2025 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2025), submitted.
- [177] S. Fodor, G. Fodor, A. L. F. de Almeida, M. Telek, "Bistatic Integrated Sensing and Communication Scenarios with Transmitter and Receiver-Side Trade-Offs," IEEE 5th International Symposium on Joint Communications & Sensing (JC&S), 2024. Submitted.
- [176] B. Sokal, Fazal-E-Asim and A. L. F. de Almeida, "A Decoupled Channel Estimation Method for Beyond Diagonal RIS," Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, US, 2024. Accepted for publication.
- [175] K. B. dos A. Benício, A. L. F. de Almeida, B. Sokal, Fazal-e-Asim, B. Makki, and G. Fodor, "RIS-Assisted Sensing: A Rank-1 Tensor Approach," Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, US, 2024. Accepted for publication.
- [174] W. C. Freitas Jr., G. Favier, A. L. F. de Almeida, "Tensor-Based Receivers for the Bi-static Sensing and Communication Scenario," Asilomar Conference on Signals, Systems, and Computers, Pacific Grove, US, 2024. Accepted for publication.
- [173] A. L. Magalhães, G. T. de Araújo, and A. L. F. de Almeida, "Closed-form Joint Symbol and Time-Varying Channel Estimation in Hybrid-RIS-aided systems," XLII Brazilian Symposium on Telecommunications and Signal Processing (SBrT 2024), Belém, Brazil, 2024. Accepted for publication.
- [172] K. B. dos A. Benício, A. L. F. de Almeida, B. Sokal, Fazal-E-Asim, B. Makki, and G. Fodor, "PARAFAC-Based Time-Varying Channel Estimation for IRS-Aided Communications," XLII Brazilian Symposium on Telecommunications and Signal Processing (SBrT 2024), Belém, Brazil, 2024. Accepted for publication.
- [171] A. L. de Araújo, L. Deneire, G. Urvoy-Keller, A. L. F. de Almeida, "Charting 5G Energy Efficiency: Flexible Energy Modeling for Sustainable Networks", 20th International Conference on Wireless and Mobile Computing, Networking and Communications (WiMob 2024). Accepted for publication.

- [170] S. Gherekhloo, K. Ardah, G. C. Nwalozi, A. L. F. de Almeida, M. Haardt, "An Efficient Channel Estimation Protocol for Channel Estimation in Double-RIS Aided MIMO Systems," European Signal Processing Conference (EUSIPCO 2024), 2024.
- [169] A. L. Magalhães and A. L. F. de Almeida, "Joint Channel and Symbol Estimation for Hybrid RIS Wireless Communications," 19th International Symposium on Wireless Communication Systems (ISWCS 2024), Rio de Janeiro, Brazil, 2024.
- [168] K. B. dos A. Benício, B. Sokal, A. L. F. de Almeida, Fazal-E-Asim, B. Makki, and G. Fodor, "Low-Complexity Tensor-Based Monostatic Sensing for IRS-Assisted Communication System," 19th International Symposium on Wireless Communication Systems (ISWCS 2024), Rio de Janeiro, Brazil, 2024.
- [167] S. R. Pavel, Y. D. Zhang, S. Sun and A. L. F. de Almeida, "Tensor Reconstruction-Based Sparse Array 2-D DOA Estimation of Mixed Coherent and Uncorrelated Signals," 2024 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2024), pp. 12876-12880.
- [166] B. Sokal, F.-E. Asim, André L. F. de Almeida, "Higher-Order Tensor-Based Joint Transmit/Receive Beamforming and IRS Optimization", Ninth International Workshop on Computational Advances in Multisensor Adaptive Processing (CAMSAP 2023), Herradura, v. 1. pp. 216-220
- [165] A. Manina, M. Grasis, A. L. F. de Almeida, M. Haardt, "Coupled Matrix Tensor Factorization via a Semi-Algebraic Solution Based on Simultaneous Matrix Diagonalization (SECSI -CMTF)", Ninth International Workshop on Computational Advances in Multisensor Adaptive Processing (CAMSAP 2023), Herradura, vol. 1, pp. 431-435, 2023.
- [164] S. Gherekhloo, K. Ardah, M. Maleki, M. Haardt, "Nested PARAFAC Tensor-based channel estimation method for double RIS-aided MIMO communication systems", EUSIPCO 2023, 2023.
- [163] K. Usevich, Y. Zniyed, M. Ishteva, P. Dreesen, A. L. F. de Almeida, "Tensor-based two-layer decoupling of multivariate polynomial maps", EUSIPCO 2023, 2023.
- [162] Maxence Giraud, Vincent Itier, Rémy Boyer, Yassine Zniyed, André de Almeida, "Décomposition de Tucker basée sur un Train de Tenseurs avec des cœurs CP contraints couples", GRETSI 2023, 2023.
- [161] G. T. de Araújo, A. L. F. de Almeida, "Joint Pilot and Phase Shift Design for IRS-assisted MIMO Communications", SBrT 2023, 2023.
- [160] Y. S. Ribeiro, A. L. F. de Almeida, F. E.-. Asim, "Aligned Channel Estimation for Beamforming Design in IRS-assisted MIMO Communications", SBrT 2023, 2023.
- [159] K. B. Benício, A. L. F. de Almeida, B. Sokal, F. E.-. Asim, B. Makki, G. Fodor, "Tensor-based modeling/estimation of static channels in IRS-assisted MIMO systems", SBrT 2023, 2023.
- [158] W. C. Freitas Jr., L. Abdalah, A. L. F. de Almeida, "Simultaneous Factorization of Multiple Khatri-Rao and Kronecker Matrix Products in MIMO systems", SBrT 2023, 2023.
- [157] P. R. B. Gomes, G. T. Araújo, A. L. F. de Almeida, B. Makki, G. Fodor, "Tensor-Based Channel Estimation for RIS-Assisted Networks Operating Under Imperfections", IEEE Global Communications Conference (GLOBECOM 2022), 2022.
- [156] H. Zheng, C. Zhou, A. L. F. de Almeida, Y. Gu, Z. Shi, "DOA Estimation via Coarray Tensor Completion with Missing Slices", in Proc. IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2022), May 2022.
- [155] B. Sokal, P. R. B. Gomes, A. L. F. de Almeida, B. Makki, G. Fodor, "IRS Phase-Shift Feedback Overhead-Aware Model Based on Rank-One Tensor Approximation", IEEE Global Communications Conference (GLOBECOM 2022), April 2022.

- [154] K. Ardah, S. Gherekhloo, A. L. F. de Almeida, M. Haardt, "Double-RIS versus single-RIS systems: Tensor-based estimation and design perspectives", in Proc. IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2022), May 2022.
- [153] P. R. B. Gomes, G. T. Araújo, B. Sokal, A. L. F. de Almeida, B. Makki, G. Fodor, "Tensor-Based Channel Estimation for RIS-Assisted Communications with Non-Ideal Phase Shift Responses", In: IEEE Workshop on Communication Networks and Power Systems, 2022, Proceedings of WCNPS 2022, 2022.
- [152] E. R. B. Falcao, D. A. Sousa, T. F. Maciel, Y. C. B. Silva, A. L. F. de Almeida, "Prova de conceito de um sistema de monitoramento de fluxo de pessoas baseado em tecnologia LoRaWAN e RFID para o transporte público urbano," In: Brazilian Telecommunications Symposium, 2022, Santa Rita do Sapucaí. Proceedings of SBrT 2022, 2022.
- [151] S. Gherekhloo, K. Ardah, A. L. F. de Almeida, M. Haardt, "Tensor-based Channel Estimation and Reflection Design for RIS-aided Millimeter-wave Massive MIMO Communication Systems", in ASILOMAR-SSC conference, November 2021.
- [150] L. Khamidullina, A. L. F. de Almeida, M. Haardt, "ML-GSVD Based MIMO-NOMA Networks", in Workshop on Smart Antennas (WSA 2021), November 2021.
- [149] Y. S. Ribeiro, F. H. Costa Neto, A. L. F. de Almeida, "Practical Hardware Models and Beamforming Design for IRS-Assisted MIMO Networks", IEEE Workshop on Communication Networks and Power Systems (WCNPS 2021), Brasilia, November 2021.
- [148] K. B. Benicio, B. Sokal, A. L. F. de Almeida, "Channel Estimation and Performance Evaluation of Multi-IRS Aided MIMO Communication System", IEEE Workshop on Communication Networks and Power Systems (WCNPS 2021), Brasilia, November 2021.
- [147] L. Khamidulina, A. L. F. de Almeida, M. Haardt, "ML-GSVD Based MIMO-NOMA Networks", in Workshop on Smart Antennas (WSA 2021), Sophia Antipolis, November 2021.
- [146] S. Gherekhloo, K. Ardah, A. L. F. de Almeida, M. Haardt, "Tensor-based Channel Estimation and Reflection Design for RIS-aided Millimeter-wave Massive MIMO Communication Systems", in Asilomar-SSC conference, 2021.
- [145] B. Sokal, A. L. F. de Almeida, M. Haardt, "Joint Channel, Data, and Phase-Noise Estimation in MIMO-OFDM Systems Using a Tensor Modeling Approach", in IEEE ICASSP 20221, Ontario, Canada, May 2021.
- [144] L. C. P. Pessoa, G. T. de Araújo, P. R. B. Gomes, A. L. F. de Almeida, "IRS-Assisted Communications Under Practical Channel Estimation and Hardware Model", XXXIX Brazilian Telecommunications Symposium (SBrT 2021).
- [143] K. B. Benício, B. Sokal, A. L. F. de Almeida, "Channel Estimation and Joint Beamforming Design for Multi-IRS MIMO systems", XXXIX Brazilian Telecommunications Symposium (SBrT 2021), 2021.
- [142] Y. S. Ribeiro, F. H. Costa Neto, A. L. F. de Almeida, "Joint Beamforming Design for IRS-Assisted Beyond 5G Wireless Networks", XXXIX Brazilian Telecommunications Symposium (SBrT 2021), 2021.
- [141] L. N. Ribeiro, S. Schwarz, A. L. F. de Almeida, M. Haardt, "Low-complexity massive MIMO tensor precoding", in Asilomar-SSC conference, 2020.
- [140] P. R. B. Gomes, A. L. F. de Almeida, J. P. C. L. da Costa, R. T. de Sousa Jr., "Tensor-Based Semi-Blind Receiver for Channel and Symbol Estimation in Frequency-Selective MIMO Systems with Phase Noise Impairments", in Brazilian Symposium on Telecommunications and Signal Processing (SBrT 2020), 2020.

- [139] G. T. de Araújo, L. C. P. Pessoa, A. L. F. de Almeida, “Channel Estimation for MIMO System Assisted by Intelligent Reflective Surface”, in Brazilian Symposium on Telecommunications and Signal Processing (SBrT 2020), 2020.
- [138] A. L. Magalhães, P. R. B. Gomes, A. L. F. de Almeida, “Semi-Supervised Receiver for MIMO Systems with Mixed Khatri-Rao-Kronecker Coding”, in Brazilian Symposium on Telecommunications and Signal Processing (SBrT 2020), 2020.
- [137] H. J. B. Nascimento, F. R. P. Cavalcanti, A. L. F. de Almeida, M. P. Mota, “Dynamic Bayesian Approach Applied in Link Adaptation Problem for Fifth Generation Network”, in Brazilian Symposium on Telecommunications and Signal Processing (SBrT 2020), 2020.
- [136] A. C. P. Santos, T. F. Maciel, A. L. Magalhães, A. L. F. de Almeida, “Integração de Redes de Sensores sem Fio à Plataforma LoRa para Serviços de Monitoramento e Controle Inteligentes”, in Brazilian Symposium on Telecommunications and Signal Processing (SBrT 2020), 2020.
- [135] K. Ardah, B. Sokal, A. L. F. de Almeida, M. Haardt, “Compressed Sensing Based Channel Estimation and Open-Loop Training Design for Hybrid Analog-Digital Massive MIMO Systems”, in IEEE International Conference in Acoustics, Speech and Signal Processing (ICASSP 2020), Barcelona, Spain, May 2020.
- [134] L. Khamidullina, A. L. F. de Almeida, M. Haardt, “Multilinear Generalized Singular Value Decomposition (ML-GSVD) with Application to Coordinated Beamforming in Multi-user MIMO Systems”, in IEEE International Conference in Acoustics, Speech and Signal Processing (ICASSP 2020), Barcelona, Spain, May 2020.
- [133] G. de Araújo, A. L. F. de Almeida, “PARAFAC-Based Channel Estimation for Intelligent Reflective Surface Assisted MIMO System”, in 11th IEEE Sensor Array and Multichannel Signal Processing Workshop (SAM 2020), Hangzhou, China, June 2020.
- [132] F. Asim, A. L. F. de Almeida, M. Haardt, C. C. Cavalcante, J. A. Nossek, “Multi-linear Encoding and Decoding for MIMO Systems”, in 11th IEEE Sensor Array and Multichannel Signal Processing Workshop (SAM 2020), Hangzhou, China, June, 2020.
- [131] D. R. Rakhimov, S. P. Deram, B. Sokal, K. Naskovska, A. L. F. de Almeida, M. Haardt, “Iterative Tensor Receiver for MIMO-GFDM systems”, in 11th IEEE Sensor Array and Multichannel Signal Processing Workshop (SAM 2020), Hangzhou, China, June 2020.
- [130] T. A. de Vasconcelos, A. L. F. de Almeida, J. A. Nossek, “Matching Strategies for Multiantenna Arrays”, 24th Int. ITG Workshop on Smart Antennas (WSA 2020), Hambourg, Feb. 2020.
- [129] M. F. K. B. Couras, P. H. de Pinho, G. Favier, J. P. C. L. da Costa, V. Zarzoso, A. L. F. de Almeida, “Multidimensional CX Decomposition of Tensors”, WCNPS 2019, Brasilia, Brazil, 2019.
- [128] P. H. de Pinho, M. F. K. B. Couras, G. Favier, J. P. C. L. da Costa, V. Zarzoso, A. L. F. de Almeida, “Semi-supervised Receivers for MIMO Systems with Multiple Khatri-Rao Coding”, Proc. Int. Conf. on Signal Processing and Communication Systems (ICSPCS) 2019, Gold Coast, Australia, 2019.
- [127] M. P. Mota, D. C. Araújo, F. H. C. Neto, A. L. F. de Almeida, F. R. P. Cavalcanti, “Adaptive Modulation and Coding based on Reinforcement Learning for 5G Networks”, IEEE GLOBECOM 2019 Workshop on Machine Learning for Wireless Communications, Honolulu, USA, 2019.
- [126] P. R. B. Gomes, G. Fodor, W. C. Freitas Jr., A. L. F. de Almeida, Y. C. B. Silva, “Tensor-Based Modeling and Processing for Channel Estimation in Two-Hop V2X MIMO Systems”, Proc. IEEE CSCN’2019, Granada, Spain, 2019.

- [125] L. N. Ribeiro, A. L. F. de Almeida, J. C. M. Mota, "Low-rank tensor MMSE equalization", Proc. 16th Int. Symposium on Wireless Communication Systems (ISWCS) 2019, Oulu, Finland, 2019.
- [124] A. M. Pessoa, B. Sokal, C. F. M. Silva, T. F. Maciel, A. L. F. de Almeida, Y. C. B. Silva, F. R. P. Cavalcanti, "CDL-based Channel Model for 5G MIMO Systems in Remote Rural Areas", Proc. 16th Int. Symposium on Wireless Communication Systems (ISWCS) 2019, Oulu, Finland, 2019.
- [123] F. Fohlmeister, F. Antreich, V. Wilken, M. Kriegel, J. C. M. Mota, A. L. F. de Almeida, F. G. M. Pinheiro, J. A. Nossek, "Evaluation of Low Latitude Scintillation Data with a Dual Kalman Smoother," Proc. International Technical Meeting of The Institute of Navigation, Reston, Virginia, January 2019, pp. 647-659.
- [122] C. Enneking, F. Antreich, M. Appel, A. L. F. de Almeida, "Pure Pilot Signals: How Short can we Choose GNSS Spreading Codes?", Proc. International Technical Meeting of The Institute of Navigation, Reston, Virginia, January 2019, pp. 925-935.
- [121] W. C. Freitas Jr., G. Favier, A. L. F. de Almeida, "Two-Way MIMO Decode-and-Forward Relaying Systems with Tensor Space-Time Coding", Proc. European Signal Processing Conference (EUSIPCO) 2019, A Coruña, Spain, 2019.
- [120] Y. Zniyed, R. Boyer, A. L. F. de Almeida, G. Favier, "Tensor-train modeling for MIMO-OFDM tensor coding and forwarding relay systems", Proc. European Signal Processing Conference (EUSIPCO) 2019, A Coruña, Spain, 2019.
- [119] C. C. R. Garcez, D. V. de Lima, R. K. Miranda, F. Mendonça, J. P. C. L. da Costa, A. L. F. de Almeida, R. T. de Sousa Jr., "Técnicas Tensoriais Baseadas em Rastreamento de Subespaços Aplicadas a Receptores GNSS", Proc. Brazilian Telecommunications and Signal Processing Symposium, SBrT 2019.
- [118] F. L. L. de Mendonça, D. V. de Lima, M. R. Zanatta, J. P. C. L. da Costa, R. K. Miranda, A.L. F. de Almeida, R. T. de Sousa Jr., "Estimação de Componentes de Multipercorso para Receptor Tensorial de GPS de 2a e 3a Geração", Proc. Brazilian Telecommunications and Signal Processing Symposium, SBrT 2019.
- [117] D. C. Araujo, A. L. F. de Almeida, "Beam Management Solution Using Q-Learning Framework", Proc. IEEE CAMSAP 2019.
- [116] B. Sokal, A. L. F. de Almeida, M. Haardt, "Semi-Blind Receiver for Two-Hop MIMO Relaying Systems via Selective Kronecker Product Modeling", Proc. IEEE CAMSAP 2019.
- [115] RIBEIRO, LUCAS N. ; de Almeida, Andre L. F. ; MYERS, NITIN J. ; HEATH, ROBERT W. . Tensor-based Estimation of mmWave MIMO Channels with Carrier Frequency Offset. In: ICASSP 2019 2019 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2019, Brighton. ICASSP 2019 - 2019 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2019. p. 4155.
- [114] ARDAH, KHALED ; de Almeida, Andre L. F. ; HAARDT, MARTIN . A Gridless CS Approach for Channel Estimation in Hybrid Massive MIMO Systems. In: ICASSP 2019 2019 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2019, Brighton. ICASSP 2019 - 2019 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2019. p. 4160.
- [113] ASIM, F. ; NOSSEK, J. A. ; ANTREICH, F. ; CAVALCANTE, C. C. ; de ALMEIDA, A. L. F. . Maximum Likelihood Channel Estimation for Millimeter-Wave MIMO Systems with Hybrid Beamforming. In: ITG Workshop on Smart Antennas (WSA 2019), 2019, Viena. Proc. 23rd ITG International Workshop on Smart Antennas, 2019. v. 1. p. 6.
- [112] ARDAH, KHALED ; de ALMEIDA, A. L. F. ; HAARDT, M. . Low-Complexity Millimeter Wave Channel Estimation in MIMO-OFDM Hybrid Beamforming Systems. In: ITG Workshop on Smart Antennas (WSA 2019), 2019, Viena. Proc. 23rd ITG International Workshop on Smart Antennas, 2019. v. 1. p. 1-6.

- [111] SHAKERI, ZAHRA ; TAKI, BATOUL ; F. DE ALMEIDA, ANDRE L. ; GHASSEMI, MOHSEN ; BAJWA, WAHEED U. . Revisiting Sparse Channel Estimation in Massive MIMO-OFDM Systems. In: 2019 IEEE 20th International Workshop on Signal Processing Advances in Wireless Communications (SPAWC), 2019, Cannes. 2019 IEEE 20th International Workshop on Signal Processing Advances in Wireless Communications (SPAWC), 2019. v. 1. p. 1-5.
- [110] C. Enneking, F. Antreich, A. L. F. de Almeida, "Early-Late Discriminator Performance of CDMA: Limitations of the Spectral Separation Coefficient", Proc. NAVITEC 2018 Signal Workshop, Noordwijk, The Netherlands, 2018.
- [109] NARSKOVSKA, K. ; HAARDT, M. ; de ALMEIDA, A. L. F. . Generalized Tensor Contractions for an Improved Receiver Design in MIMO-OFDM Systems. In: IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2018, Calgary. Proceedings of ICASSP 2018, 2018. v. 1. p. 3186-3190.
- [108] ZNIYED, YASSINE ; BOYER, REMY ; DE ALMEIDA, ANDRE L.F. ; FAVIER, GERARD . High-Order CPD Estimation with Dimensionality Reduction Using a Tensor Train Model. In: 2018 26th European Signal Processing Conference (EUSIPCO), 2018, Roma. 2018 26th European Signal Processing Conference (EUSIPCO), 2018. v. 1. p. 2613.
- [107] RIBEIRO, L. N. ; SOKAL, B. ; de ALMEIDA, A. L. F. ; MOTA, JOAO. C. M. . Separable Least-Mean Squares Beamforming. In: Simpósio Brasileiro de Telecomunicações e Processamento de Sinais, 2018, Campina Grande. Anais do SBrT 2018, 2018. v. 1. p. 1-5.
- [106] NARSKOVSKA, K. ; CHENG, Y. ; de ALMEIDA, A. L. F. ; HAARDT, M. . Efficient Computation of the PARAFAC2 Decomposition via Generalized Tensor Contractions. In: Asilomar Conference on Signals Systems and Computers, 2018, Pacific Grove. Proceedings of ASILOMAR SSC 2018, 2018. v. 1. p. 1-5.
- [105] SOKAL, B. ; de ALMEIDA, A. L. F. ; HAARDT, M. . Rank-One Tensor Modeling Approach to Joint Channel and Symbol Estimation in Two-Hop MIMO Relaying Systems. In: XXXV Simpósio Brasileiro de Telecomunicações, 2017, São Pedro. Anais do SBrT 2017, 2017.
- [104] NARSKOVSKA, K. ; HAARDT, M. ; de ALMEIDA, A. L. F. . Generalized Tensor Contraction with Application to Khatri-Rao Coded MIMO OFDM Systems. In: The Seventh International Workshop on Computational Advances in Multisensor Adaptive Processing, 2017, Curaçao. Proceedings of CAMSAP 2017, 2017. v. 1. p. 1-5.
- [103] ARAUJO, D. C. ; de ALMEIDA, A. L. F. . Tensor-Based Compressed Estimation of Frequency-Selective mmWave MIMO Channels. In: The Seventh IEEE Workshop on Computational Advances in Multisensor Adaptive Processing, 2017, Curaçao. Proceedings of CAMSAP 2017, 2017. v. 1. p. 1-5.
- [102] RIBEIRO, L. N. ; SCHWARZ, S. ; RUPP, M., de ALMEIDA, A. L. F. ; "A low-complexity equalizer for massive MIMO systems based on array separability," 2017 25th European Signal Processing Conference (EUSIPCO), 2017, pp. 2453-2457.
- [101] KOFIDIS, ELEFTHERIOS ; CHATZICHRISTOS, CHRISTOS ; de Almeida, Andre L. F. . Joint channel estimation / data detection in MIMO-FBMC/OQAM systems A tensor-based approach. In: 2017 25th European Signal Processing Conference (EUSIPCO), 2017, Kos. 2017 25th European Signal Processing Conference (EUSIPCO), 2017. p. 420.
- [100] HAMMOUD, B. ; ANTREICH, F. ; NOSSEK, J. A. ; DA COSTA, JOAO PAULO C. L. ; de ALMEIDA, ANDRÉ LF . Tensor-Based Approach for Time-Delay Estimation. In: ITG Workshop on Smart Antennas, 2016, Munique. Proceedings of ITG WSA2016. Berlin: VDE VERLAG GMBH, 2016. v. 1. p. 103-109.

- [99] RIBEIRO, LUCAS N. ; de Almeida, Andre L. F. ; MOTA, JOAO C. M. . Tensor beamforming for multilinear translation invariant arrays. In: 2016 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2016, Shanghai. 2016 IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP). v. 1. p. 2966-5.
- [98] CAVALCANTE, I. V. ; de ALMEIDA, ANDRÉ LF ; HAARDT, MARTIN . Joint Channel Estimation for Three-Hop MIMO Relaying Systems. In: IEEE International Conference on Acoustics, Speech and Signal Processing, 2016, Xangai. Proceedings of ICASSP 2016, 2016. v. 1. p. 1-5.
- [97] ARAUJO, DANIEL C. ; KARIPIDIS, E. ; de ALMEIDA, A. L. F. ; MOTA, João Cesar M. . Improving Spectral Efficiency in Large-Array FDD Systems with Hybrid Beamforming. In: IEEE Sensor Array and Multichannel Signal Processing Worskshop (SAM2016), 2016, Rio de Janeiro. Proceedings of IEEE SAM2016, 2016. v. 1. p. 1-5.
- [96] RIBEIRO, L. N. ; ZARZOSO, V. ; de ALMEIDA, A. L. F. . Enhanced Block Term Decomposition for Atrial Activity Extraction in Atrial Fibrillation ECG. In: IEEE Sensor Array and Multichannel Signal Processing Worskshop (SAM2016), 2016, Rio de Janeiro. Proceedings of IEEE SAM2016, 2016. v. 1. p. 1-5.
- [95] MARINHO, M. A. M. ; COSTA, J. P. C. L. ; ANTREICH, F. ; de ALMEIDA, A. L. F. ; GALDO, G. ; de FREITAS, E. P. ; VINEL, A. . Array Interpolation Based on Multivariate Adaptive Regression Splines. In: IEEE Sensor Array and Multichannel Signal Processing Worskshop (SAM2016), 2016, Rio de Janeiro. Proceedings of IEEE SAM2016, 2016. v. 1. p. 1-5.
- [94] COSTA, J. P. C. L. ; de ALMEIDA, A. L. F. ; FREITAS JUNIOR, W. C. ; LIMA, D. V. . Low complexity closed-form solution to semi-blind joint channel and symbol estimation in MIMO-OFDM. In: 19th International Conference on OFDM and Frequency Domain Techniques (ICOF 2016), 2016, Essen. Proceedings of ICOF 2016, 2016. v. 1. p. 1-5.
- [93] MARINHO, M. A. M. ; COSTA, J. P. C. L. ; ANTREICH, F. ; de ALMEIDA, ANDRÉ LF . Multidimensional Array Interpolation Applied to Direction of Arrival Estimation. In: Workshop on Smart Antennas (WSA), 2015, Ilmenau. Proceedings of WSA'2015, 2015. v. 1. p. 1-6.
- [92] SILVA, A. P. ; COMON, P. ; de Almeida, Andre L. F. . An Iterative Deflation Algorithm for Exact CP Tensor Decomposition. In: IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP), 2015, Brisbane. Proceedings of ICASSP'15, 2015. v. 1. p. 1-5.
- [91] GOMES, P. R. B. ; de ALMEIDA, A. L. F. ; MOTA, JOAO. C. M. . Estimação Cega de Assinaturas Espaciais para Arranjos em Formato L Baseada em Modelagem Tensorial de Correlações Cruzadas. In: XXXIII Simpósio Brasileiro de Telecomunicações, 2015, Juiz de Fora. Anais do XXXIII Simpósio Brasileiro de Telecomunicações, 2015. v. 1. p. 1-5.
- [90] VALDUGA, S. T. ; MACHADO, R. ; de ALMEIDA, A. L. F. ; LOIOLA, M. B. . Esquema MIMO Beamforming Otimizado para Canal de Retorno de Baixa Taxa de Transmissão. In: XXXIII Simpósio Brasileiro de Telecomunicações, 2015, Juiz de Fora. Anais do XXXIII Simpósio Brasileiro de Telecomunicações, 2015. v. 1. p. 1-5.
- [89] RIBEIRO, L. N. ; de Almeida, Andre L. F. ; MOTA, JOAO. C. M. . Identification of Separable Systems using Trilinear Adaptive Filtering. In: IEEE Workshop on Computational Advances for Multi-Sensor Adaptive Processing, 2015, Cancún. Proc. IEEE CAMSAP 2015, 2015. v. 1. p. 1-4.
- [88] MIRANDA, R. K. ; DA COSTA, JOAO PAULO C. L. ; ROEMER, F. ; de Almeida, André L.F. ; GALDO, G. . Generalized Sidelobe Cancellers for Multidimensional Separable Arrays. In: IEEE Workshop on Computational Advances for Multi-Sensor Adaptive Processing, 2015, Cancún. Proc. IEEE CAMSAP 2015, v. 1. p. 1-4.

- [87] ARAUJO, DANIEL C. ; de Almeida, Andre L. F. ; MOTA, JOAO C. M. . Compressive sensing based channel estimation for massive MIMO systems with planar arrays. In: 2015 IEEE 6th International Workshop on Computational Advances in MultiSensor Adaptive Processing (CAMSAP), 2015, Cancun., v. 1. p. 413-4.
- [86] ARAUJO, D. C. , de ALMEIDA, André L.F., AXNAS, J. MOTA, J.C.M. , Channel Estimation for Millimeter-Wave Very Large MIMO, . In: European Signal Processing Conference (EUSIPCO), Lisbon, 2014.
- [85] de ALMEIDA, André L.F. ; KIBANGOU, A. Y. . Distributed Large-Scale Tensor Decomposition. In: IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2014), 2014, Florence. Proceedings of IEEE ICASSP2014, 2014. v. 1. p. 1-5.
- [84] GOMES, P. R. B. ; de ALMEIDA, A. L. F. ; COSTA, J. P. C. L. . A Fourth-Order Tensor Method for Blind Spatial Signature Estimation. In: IEEE International Conference on Acoustics, Speech and Signal Processing (ICASSP 2014), 2014, Florence. Proceedings of IEEE ICASSP2014, 2014. v. 1. p. 1-5.
- [83] CAVALCANTE, I. V. ; de ALMEIDA, A. L. F. ; HAARDT, M. . Tensor-Based Approach to Channel Estimation in Amplify-and-Forward MIMO Relaying Systems. In: IEEE Sensor Array and Multichannel Signal Processing Workshop (SAM2014), 2014, A Coruña. Proceedings of IEEE SAM2014, v. 1. p. 1-4.
- [82] MARINHO, M. A. M. ; de FREITAS, E. P. ; COSTA, J. P. C. L. ; de ALMEIDA, A. L. F. . Using MIMO Techniques to Enhance Communication Among Static and Mobile Nodes in Wireless Sensor Networks. In: IEEE International Conference on Advanced Information Networking and Applications, (IEEE AINA 2013), Barcelona, 2013. v. 1. p. 1-5.
- [81] MARINHO, M. A. M. ; FREITAS, E. P. ; COSTA, J. P. C. L. ; de ALMEIDA, A. L. F. . Using Cooperative MIMO Techniques and UAV Relay Networks to Support Connectivity in Sparse Wireless Sensor Networks. In: IEEE International Conference on Computing, Management and Telecommunications (ComManTEL 2013), Ho Chi Minh City, 2013. v. 1. p. 1-5.
- [80] de ALMEIDA, A. L. F. ; KIBANGOU, A. Y. ; MIRON, S. ; ARAUJO, D. C. . Joint Data and Connection Topology Recovery in Collaborative Wireless Sensor Networks. In: IEEE Int. Conf. on Acoustics, Speech and Signal Processing (IEEE ICASSP), 2013, Vancouver. Proceedings of ICASSP 2013, 2013.
- [79] VASCONCELOS, F. HERBERT L. ; DA SILVA, THOMAZ. E. V. ; de Almeida, Andre L. F. ; MOTA, JOAO. C. M. ; ANDRIOLA, WAGNER B. . Multilinear decomposition application into students' evaluation of teaching effectiveness. In: 2013 IEEE Global Engineering Education Conference (EDUCON), 2013, Berlin. 2013 IEEE Global Engineering Education Conference (EDUCON), 2013. p. 910.
- [78] SOUSA, I. F. S. ; de ALMEIDA, A. L. F. ; MACIEL, T. F. . Distributed Approach for Joint Symbol and Channel Estimation in Heterogeneous Cellular Networks. In: Simpósio Brasileiro de Telecomunicações, 2013, Fortaleza. Anais do Simpósio Brasileiro de Telecomunicações, 2013.
- [77] SENA, E. D. R. ; de ALMEIDA, A. L. F. . Reconhecimento Facial Usando Wavelets De Gabor Via Álgebra Multilinear. In: Simpósio Brasileiro de Telecomunicações, 2013, Fortaleza. Anais do Simpósio Brasileiro de Telecomunicações, 2013.
- [76] SILVA, T. E. V. ; VASCONCELOS, F. H. L. ; MOTA, João C M ; de ALMEIDA, A. L. F. ; ANDRIOLA, W. B. . Ferramentas De Processamento e Análise De Informação Aplicadas Ao Ensino De Engenharia. In: Simpósio Brasileiro de Telecomunicações, 2013, Fortaleza. Anais do Simpósio Brasileiro de Telecomunicações, 2013.
- [75] ARAUJO, D. C. ; de ALMEIDA, A. L. F. ; MOTA, João C M ; HUI, D. . Estimation of Very Large MIMO Channels Using Compressed Sensing. In: Simpósio Brasileiro de Telecomunicações, 2013, Fortaleza. Anais do Simpósio Brasileiro de Telecomunicações, 2013.

- [74] GOMES, P. R. B. ; de ALMEIDA, A. L. F. . Um Método Tensorial Eficiente Para Estimação Cega De Assinaturas Espaciais. In: Simpósio Brasileiro de Telecomunicações, 2013, Fortaleza. Anais do Simpósio Brasileiro de Telecomunicações, 2013.
- [73] RIBEIRO, L. N. ; MOTA, João C M ; de ALMEIDA, A. L. F. . Trilinear Wiener Filtering: Application to Equalization Problems. In: Simpósio Brasileiro de Telecomunicações, 2013, Fortaleza. Anais do Simpósio Brasileiro de Telecomunicações, 2013.
- [72] ARAUJO, G. T. ; de ALMEIDA, A. L. F. . Receptor Cego PARATUCK2 Para Sistemas MIMO Baseados Em Codificação Espaço-Temporal. In: Simpósio Brasileiro de Telecomunicações, 2013, Fortaleza. Anais do Simpósio Brasileiro de Telecomunicações, 2013.
- [71] PAIVA, J. S. ; de ALMEIDA, A. L. F. . Modelagem Tensorial Para Estimação De Parâmetros Em Arranjos L-shape De Antenas Vetoriais. In: Simpósio Brasileiro de Telecomunicações, 2013, Fortaleza. Anais do Simpósio Brasileiro de Telecomunicações, 2013.
- [70] de ALMEIDA, A. L. F.; LUCIANI, X. ; COMON, P.. Fourth-Order CONFAC Decomposition Approach for Blind Identification of Underdetermined Mixtures, In: European Signal Processing Conference (EUSIPCO), Bucharest, 2012.
- [69] de FREITAS, E. P., da COSTA, J. P. L., de ALMEIDA, A. L. F., MARINHO, M.. Applying MIMO Techniques to Minimize Energy Consumption for Long Distances Communications in Wireless Sensor Networks, In: International Conference on Next Generation Wired/Wireless Advanced Networking (NEW2AN), St. Petersburg, 2012.
- [68] da COSTA. D. B., de ALMEIDA, A. L. F., FERNANDES, C. A. R. .Transmit/Receive Beamforming in Multiuser AF Relay Networks with Opportunistic Scheduling, In: Brazilian Telecommunications Symposium (SBrT'12), Brasília, 2012.
- [67] de ALMEIDA, A. L. F., FERNANDES, C. A. R., da COSTA. D. B. . PARAFAC Receiver for Uplink Cooperative Relay-Assisted DS-CDMA Systems, In: Brazilian Telecommunications Symposium (SBrT'12), Brasília, 2012.
- [66] FERNANDES, C. A. R., da COSTA. D. B., de ALMEIDA, A. L. F. .Outage Analysis of Cooperative OFDM Systems with Nonlinear Amplifiers and Relay Selection, In: Brazilian Telecommunications Symposium (SBrT'12), Brasília, 2012.
- [65] ARAÚJO, D. C., FREITAS JR., W. C., de ALMEIDA, A. L. F. . A Bidirectional Processing Receiver for Layered Space-Time MIMO Systems, In: Brazilian Telecommunications Symposium (SBrT'12), Brasília, 2012.
- [64] LIU, K.; da COSTA, J. P. C .L.; de ALMEIDA, A. L. F.; SO, H. C. . A Closed Form Solution to Semi-Blind Joint Symbol and Channel Estimation in MIMO-OFDM Systems, In: Proceedings of IEEE Int. Conf. on Signal Processing, Communication and Computing (IEEE ICSPCC), Hong Kong, 2012
- [63] de ALMEIDA, A. L. F. ; LUCIANI, X. ; STEGEMAN, A. ; COMON, P. . Blind MIMO System Identification Using Constrained Factor Decomposition of Output Generating Function Derivatives. In: IEEE Workshop on Statistical Signal Processing, 2011, Nice. Proceedings of IEEE Workshop on Statistical Signal Processing (IEEE SSP), 2011.
- [62] FERNANDES, C. A. R. ; de ALMEIDA, A. L. F. ; da COSTA, D. B. . Blind Receiver for Amplify-and-Forward Cooperative Diversity Scheme. In: IEEE Workshop on Signal Processing for Wireless Communications, 2011, São Francisco. Proceedings of IEEE Workshop on Signal Processing for Wireless Communications (IEEE SPAWC), 2011.

- [61] da SILVA, I. L. J. ; de ALMEIDA, A. L. F. .Multiuser Receiver for PUCCH Signaling With Transmit Diversity. In: IEEE Workshop on Signal Processing for Wireless Communications, 2011, San Francisco. Proceedings of IEEE Workshop on Signal Processing for Wireless Communications (IEEE SPAWC), 2011.
- [60] da COSTA, M. N. ; FAVIER, G ; de ALMEIDA, A. L. F. ; ROMANO, J. M. T. .Tensor Coding for CDMA-MIMO Wireless Communication Systems. In: European Signal Processing Conference (EUSIPCO), Barcelona, 2011.
- [59] KIBANGOU, A. Y.; de ALMEIDA, A. L. F. .Distributed Khatri-Rao Space-Time Coding and Decoding for Cooperative Networks.In: European Signal Processing Conference (EUSIPCO), Barcelona, 2011.
- [58] de ALMEIDA, A. L. F. ; FREITAS JR, W. C ; XIMENES, L. R. . Blind Receiver for Multi-Layered Space-Frequency Coded MIMO Schemes Based on Temporally-Extended Linear Constellation Precoding. In: IEEE Vehicular Technology Conference (IEEE VTC Fall), San Francisco, 2011.
- [57] XIMENES, L. R.; de ALMEIDA, A. L. F. . Performance Evaluation of Mobile Phone Antennas in Physical MIMO Channels Using Polarized Spherical Harmonic Decomposition. In: IEEE Vehicular Technology Conference (IEEE VTC Fall), San Francisco, 2011.
- [56] XIMENES, L. R. ; de ALMEIDA, A. L. F. . Antenna Array Optimization for Channel Model Using Spherical Harmonics Decomposition. In: Brazilian Telecommunications Symposium (SBrT'11), Curitiba, 2011.
- [55] MOTA, J. C. M. ; FERNANDES, C. E. R. ; FERNANDES, C. A. R. ; CAVALCANTE, C. C. ; de ALMEIDA, A. L. F. ; FREITAS JR, W. C. Processamento Tensorial de Sinais e Geometria da Informação: Novos Caminhos para os Sistemas de Comunicações Digitais, In: Brazilian Telecommunications Symposium (SBrT'11), Curitiba, 2011.
- [54] de ALMEIDA, A. L. F. .Blind Joint Detection and Channel Estimation in Space-Frequency Diversity Systems Using Time-Varying Linear Constellation Precoding. In: Brazilian Telecommunications Symposium (SBrT'11), Curitiba, 2011.
- [53] BINELO, M. ; de ALMEIDA, A. L. F. ; CAVALCANTI, F. R. P. . A Heuristic Approach to Antenna Array Topology Optimization in MIMO Systems. In: Brazilian Telecommunications Symposium (SBrT'11), Curitiba, 2011.
- [52] LUCIANI, X.; de ALMEIDA, A. L. F.; COMON, P. Blind Identification of Underdetermined Mixtures of Ccomplex Sources Based on the Characteristic Function. In: EUSIPCO - European Signal Processing Conference, Aalborg, 2010.
- [51] da SILVA, I. L. J. ; de ALMEIDA, A. L. F. ; BALDEMAIR, R. ; FALAHATI, S. ; CAVALCANTI, F. R. P. . Improved Data-Aided Channel Estimation in LTE PUCCH Using a Tensor Modeling Approach. In: IEEE International Conference on Communications, Cape Town, 2010.
- [50] de ALMEIDA, A. L. F. ; DA SILVA, I. L. J. ; CAVALCANTI, F. R. P. .Closed-Loop Hybrid MIMO System With Joint Transmit Antenna and Mode Selection Based on Capacity Maximization. In: IEEE Workshop on Signal Processing Advances in Wireless Communications (IEEE SPAWC), Marrakech, 2010.
- [49] da SILVA, I. L. J. ; de ALMEIDA, A. L. F. ; BALDEMAIR, R. ; FALAHATI, S. ; CAVALCANTI, F. R. P. . A New Multi-User Receiver For PUCCH LTE Format 1. In: IEEE Workshop on Signal Processing Advances in Wireless Communications (IEEE SPAWC), Marrakech, 2010.
- [48] KIBANGOU, A. Y. ; de ALMEIDA, A. L. F. .Distributed PARAFAC Based DS-CDMA Blind Receiver for Wireless Sensor Networks. In: IEEE Workshop on Signal Processing Advances in Wireless Communications (IEEE SPAWC), Marrakech, 2010.

- [47] de ALMEIDA, A. L. F. ; FAVIER, G . MIMO Transceiver Combining Space-Frequency Spreading and Block-Coding. In: IEEE Vehicular Technology Conference (IEEE VTC Fall), Ottawa, 2010.
- [46] BINELO, M. ; de ALMEIDA, A. L. F. ; MEDBO, J. ; ASPLUND, H. ; CAVALCANTI, F. R. P. MIMO Channel Characterization and Performance Evaluation in an Outdoor Environment. In: IEEE Vehicular Technology Conference (IEEE VTC Fall), Ottawa, 2010.
- [45] XIMENES, L. ; de ALMEIDA, A. L. F. . Capacity of MIMO Antenna Systems Using Spherical Harmonics Expansion. In: IEEE Vehicular Technology Conference, (IEEE VTC Fall), Ottawa, 2010.
- [44] da SILVA, I. L. J. ; de ALMEIDA, A. L. F. ; BALDEMAIR, R. ; CAVALCANTI, F. R. P. ; FALAHATI, S. . A Multi-User Receiver for PUCCH LTE In Non-Cooperative Multi-Cell Architectures. In: IEEE Vehicular Technology Conference (IEEE VTC Fall), Ottawa, 2010.
- [43] de ALMEIDA, A. L. F. ; COMON, P. ; LUCIANI, X. . Deterministic Blind Separation of Sources Having Different Symbol Rates Using Tensor-Based Parallel Deflation. In: LVA/ICA Workshop on Latent Variable Analysis and Signal Separation, Saint Malo, Proc. 9th International Workshop on Latent Variable Analysis and Signal Separation, 2010.
- [42] de ALMEIDA, A. L. F. ; LUCIANI, X. ; COMON, P. .Blind Identification of Underdetermined Mixtures Based on the Hexacovariance and Higher-Order Cyclostationarity. In: IEEE Workshop on Statistical Signal Processing, 2009, Cardiff. Proceedings of IEEE SSP 2009, 2009. v. 1. p. 1-4.
- [41] de ALMEIDA, A. L. F. ; FAVIER, G. ; MOTA, J. C. M. .Space-Time Spreading-Multiplexing for MIMO Antenna Systems With Blind Detection using the PARATUCK-2 Tensor Decomposition. In: EUSIPCO - European Signal Processing Conference, Lausanne, 2008.
- [40] de ALMEIDA, A. L. F. ; DA SILVA, I. L. J. ; CAVALCANTI, F. R. P. ; FAVIER, G. . Tensor-based precoding with blind MIMO channel estimation and transmit antenna selection. In: IEEE SPAWC Workshop on Signal Processing Advances in Wireless Communications, Recife. Proceedings of IEEE SPAWC'2008, 2008. v. 1. p. 386-390.
- [39] de ALMEIDA, A. L. F. ; MOTA, J. C M ; FAVIER, G. . PARAFAC Modeling/Estimation of Time-Varying Space-Time Multipath Channels.In: InfoBrasil- I Congresso Tecnológico TI e Telecom, 2008, Fortaleza. Anais da InfoBrasil'2008, 2008.
- [38] de ALMEIDA, A. L. F. ; FAVIER, G. ; FERNANDES, C. A. R. ; MOTA, J. C. M. .A Trilinear Decomposition Approach to Space-Time-Frequency Multiple-Access Wireless Systems. In: Workshop on Signal Processing Advances in Wireless Communications (SPAWC'07), Helsinki. Proceedings of IEEE SPAWC'2007, 2007. v. 1. p. 1-5.
- [37] de ALMEIDA, A. L. F. ; FAVIER, G. ; MOTA, J. C. M. . Tensor-based Space-Time Multiplexing (TSTM) for MIMO-OFDM Systems: Receiver Algorithms and Performance Evaluation. In: Brazilian Telecommunications Symposium (SBRT'07), Recife, 2007.
- [36] de ALMEIDA, A. L. F. ; FAVIER, G. ; MOTA, J. C. M. . Constrained Space-Time Spreading for MIMO-CDMA Systems with Blind Detection. In: European Signal Processing Conference (EUSIPCO'07), Poznan, 2007.
- [35] de ALMEIDA, A. L. F. ; FAVIER, G. ; MOTA, J. C. M. .The Trilinear Decomposition with Constraints with Application to MIMO Antenna Systems. In: GRETSI Symposium on Signal and Image Processing, Troyes, 2007.
- [34] de ALMEIDA, A. L. F. ; FAVIER, G. ; MOTA, J. C. M. . Space-Time Spreading MIMO System Using Canonical Precoding Tensor Model. Proceedings of ASILOMAR-SSC conference. v. 1. p. 470-474.

- [33] de ALMEIDA, A. L. F. ; FAVIER, G. ; MOTA, J. C. M. .Space-Time Multiplexing Codes: A Tensor Modeling Approach. In: Workshop on Signal Processing Advances in Wireless Communications (SPAWC'06), 2006, Cannes. Proceedings of IEEE SPAWC'2006, 2006. v. 1. p. 1-5.
- [32] de ALMEIDA, A. L. F. ; FAVIER, G. ; MOTA, J. C. M. ; CAVALCANTE, C. C. . Tensor-Based Space-Time Multiplexing Codes for MIMO-OFDM Systems with Blind Detection. In: 17th IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (PIMRC'06), Helsinki. Proceedings of IEEE PIMRC 2006, 2006. v. 1. p. 1-5.
- [31] de ALMEIDA, A. L. F. ; FAVIER, G. ; MOTA, J. C. M. . Trilinear Space-Time-Frequency Codes for Broadband MIMO-OFDM Systems. In: International Telecommunications Symposium (ITS'06), 2006, Fortaleza. Proceedings of ITS'2006, 2006. v. 1. p. 764-770.
- [30] de ALMEIDA, A. L. F. ; FAVIER, G. ; MOTA, J. C. M. ; de LACERDA NETO, R. L. . Estimation of Frequency-Selective Block-Fading MIMO Channels Using PARAFAC Modeling and Alternating Least Squares. Proceedings of ASILOMAR-SSC conference, 2006. v. 1. p. 1630-1634.
- [29] de ALMEIDA, A. L. F. .Multipath Parameter Estimation of Time-Varying Space-Time Communication Channels Using Parallel Factor Analysis. In: IEEE ICASSP - International Conference on Acoustics, Speech and Signal Processing, Toulouse, 2006.
- [28] de LACERDA NETO, R. L. ; de ALMEIDA, A. L. F. ; FAVIER, G ; MOTA, J. C. M. ; DEBBAH, M. . Performance evaluation of supervised PARAFAC receivers for CDMA systems. In: International Telecommunications Symposium, Fortaleza, 2006. v. 1. p. 829-834.
- [27] CHAVES, F. S. ; de ALMEIDA, A. L. F. ; MOTA, J. C. M. .Performance Evaluation of Adaptive H-infinity 8734; Space-Time Equalizers for Wireless Communication Systems with Asynchronous Interference. In: IEEE VI International Telecommunications Symposium, Fortaleza, 2006.
- [26] FREITAS JR., W. C ; LOPES, R. R. ; de ALMEIDA, A. L. F. ; CAVALCANTI, F. R. P. . Exploring Dimensions of the MIMO Wireless Channel: Multidimensional Link Adaptation. In: 61th IEEE Vehicular Technology Conference, Estocolmo, 2005.
- [25] CHAVES, F. S. ; MOTA, J. C. M ; COSTA FILHO, J. T. ; de ALMEIDA, A. L. F. . Equalizador Adaptativo Robusto à Interferência Assíncrona. In: Brazilian Telecommunications Symposium (SBRT'05), Campinas, 2005.
- [24] VIGELIS, R. F ; de ALMEIDA, A. L. F. ; MOTA, J. C. M. .Infinitely Reiterated Data-Reusing LMS Algorithm. In: Brazilian Telecommunications Symposium (SBRT'05), Campinas, 2005.
- [23] de ALMEIDA, A. L. F. ; FAVIER, G. ; MOTA, J. C. M. .PARAFAC Models for Wireless Communication Systems. In: 4th International Conference on Physics in Signal and Image Processing (PSIP'05), Toulouse, 2005.
- [22] de ALMEIDA, A. L. F. ; FAVIER, G. ; MOTA, J. C. M. .Combined PARAFAC-Subspace Approach to Blind Multiuser Equalization. In: Brazilian Telecommunications Symposium (SBT'05), Campinas, 2005.
- [21] de ALMEIDA, A. L. F. ; FAVIER, G. ; MOTA, J. C. M. .Blind Multiuser Equalization using a PARAFAC-Subspace Approach. In: GRETSI Symposium, Louvain-la-Neuve, 2005.
- [20] de ALMEIDA, A. L. F. ; FAVIER, G. ; MOTA, J. C. M. .PARAFAC Receiver for Blind Multiuser Equalization in Wireless Communication Systems with Temporal Oversampling. In: European Signal Processing Conference (EUSIPCO'05), Antalya, 2005.

- [19] de ALMEIDA, A. L. F. ; FAVIER, G. ; MOTA, J. C. M .Generalized PARAFAC Model for Multidimensional Wireless Communications with Application to Blind Multiuser Equalization. In: 39th Asilomar Conference on Signals, Systems and Computers (ASILOMAR'05), Pacific Grove, 2005.
- [18] de ALMEIDA, A. L. F. ; FAVIER, G. ; MOTA, J. C. M. ; CAVALCANTE, C. C . PARAFAC Models for Hybrid MIMO: Joint Blind Channel Estimation and Detection. In: Wireless World Forum (WWRF'05), Paris, 2005.
- [17] KIBANGOU, A. Y. ; FAVIER, G ; de ALMEIDA, A. L. F. . Blind Identification of Series-Cascade Nonlinear Channels. In: ASILOMAR Conference on Signals, Systems and Computers, 2005, Pacific Grove. Proceedings of ASILOMAR-SSC conference, 2005. v. 1. p. 422-426.
- [16] FREITAS JR., W. C. ; de ALMEIDA, A. L. F. ; CAVALCANTI, F. R. P. ; MOTA, J. C. M. .Joint Interference Cancellation and Subtraction for a Hybrid Receiver in Kronecker Correlated MIMO Wireless Channels. In: Brazilian Telecommunications Symposium (SBT), Belém, 2004.
- [15] de ALMEIDA, A. L. F. ; MOTA, J. C. M. ; CAVALCANTI, F. R. P. . A Space-Time Multi-User Detector with Decoupled Processing for Wireless Communications. In: Brazilian Telecommunications Symposium (SBT), Belém, 2004.
- [14] de ALMEIDA, A. L. F. ; FREITAS JR., W. C. ; CAVALCANTI, F. R. P. . Interference Cancellation Receiver for Space-Time Block-Coded Systems over Frequency-Selective Channels. In: World Wireless Congress, 2003, San Francisco. Proceedings of WWC'03, 2003.
- [13] de ALMEIDA, A. L. F. ; MOTA, J. C. M. ; CAVALCANTI, F. R. P. . Performance Evaluation of Space-Time Processing Receivers for MIMO Antenna Systems. In: 19^o GRETSI International Symposium on Signal and Image Processing, Paris. Proceedings of GRETSI'2003, 2003.
- [12] de ALMEIDA, A. L. F. ; FREITAS JR, W. C ; CAVALCANTI, F. R. P. ; de LACERDA NETO, R. L. . A Two-Stage Receiver for Co-channel Interference Cancellation in Space-Time Block-Coded Systems over Frequency-Selective Channels.In: BrazilianTelecommunicationsSymposium (SBrT'03), Rio de Janeiro, 2003.
- [11] de ALMEIDA, A. L. F. ; MOTA, J. C. M. ; FREITAS JR., W. C. ; CAVALCANTI, F. R. P. . Performance of MIMO Systems with Hybrid of Transmit Diversity and Spatial Multiplexing. In: Brazilian Telecommunications Symposium (SBrT'03), Rio de Janeiro, 2003.
- [10] de ALMEIDA, A. L. F. ; CAVALCANTI, F. R. P. ; FERNANDES, C. E. R. ; FREITAS JR., W. C. BLAST/MIMO Performance with Space-Time Processing Receivers. In: The 13th IEEE International Symposium on Personal, Indoor and Mobile Radio Communications, 2002, Lisbon.
- [9] de ALMEIDA, A. L. F. ; FERNANDES, C. E. R. ; CAVALCANTI, F. R. P. ; MOTA, João Cesar Moura . System Level Evaluation of Space-Time Processing for EDGE. In: 56th IEEE Vehicular Technology Conference, Vancouver. Proceedings of VTC 2002 Fall Edition, 2002.
- [8] de ALMEIDA, A. L. F. ; FERNANDES, C. E. R. ; CAVALCANTI, F. R. P. ; PANAZIO, C. M. . Space-Time Processing with a Decoupled Delayed Decision-Feedback Sequence Estimator. In: 55th IEEE Vehicular Technology Conference, Birmingham. Proceedings of VTC 2002 Spring Edition, 2002.
- [7] de ALMEIDA, A. L. F. ; FERNANDES, C. E. R. ; CAVALCANTI, F. R. P. ; MOTA, J. C. M. .Decoupled Space-Time Equalization for Mobile Communication Systems. In: International Telecommunications Symposium, Natal. Proceedings of ITS 2002, 2002.
- [6] de ALMEIDA, A. L. F. ; FERNANDES, C. E. R. ; CAVALCANTI, F. R. P. ; PANAZIO, C. M. . Space-Time Processing with a Decoupled Delayed Decision-Feedback Sequence Estimator. In: 55th IEEE Vehicular Technology Conference, 2002, Birmingham. Proceedings of VTC 2002 Spring Edition, 2002.

[5] de ALMEIDA, A. L. F. ; FERNANDES, C. E. R. ; CAVALCANTI, F. R. P. ; MOTA, J. C. M. .Performance Evaluation of Decoupled Space-Time Equalization in Mobile Radio Environments. In: International Telecommunications Symposium, Natal. Proceedings of ITS 2002, 2002.

[4] de ALMEIDA, A. L. F. ; ZANATTA FILHO, D. ; FREITAS JR., W. C. ; CAVALCANTI, F. R. P. ; CAVALCANTE, C. C. . Link Performance Evaluation for EGPRS with Multiple Antennas. In: 13th IEEE Symposium on Personal, Indoor and Mobile Radio Communications, Lisbon. Proceedings of PIMRC 2002.

[3] de ALMEIDA, A. L. F. ; FERNANDES, C. E. R. ; CAVALCANTI, F. R. P. ; MOTA, J. C. M. Eigenstructure-based Techniques for Array Processing in Wireless Communications. In: Brazilian Telecommunications Symposium (SBrT'01), Fortaleza, 2001.

[2] de ALMEIDA, A. L. F. ; FERNANDES, C. E. R. ; MOTA, J. C. M. ; CAVALCANTI, F. R. P. . A Tap Weight Selection Method for Equalization of Wireless Channels with Large Multipath Delay. In: Brazilian Telecommunications Symposium (SBrT'01), Fortaleza, 2001.

[1] de ALMEIDA, A. L. F. ; FERNANDES, C. E. R. ; CAVALCANTI, F. R. P. ; MOTA, J. C. M. Performance Evaluation of Sub-Space Techniques for Array Processing in TDMA Systems. In: 54th IEEE vehicular Technology Conference, 2001, Atlantic City. Proceedings of VTC 2001 Fall Edition, 2001.