

List of Publications

Herwig Wendt

1 International Journals

- [1] G. Valenza, H. Wendt, K. Kiyono, J. Hayano, E. Watanabe, Y. Yamamoto, P. Abry, R. Barbieri, "Multifractal Point-Process Heartbeat Dynamics: a Congestive Heart Failure Survivor Prediction Study," 2017. *submitted*.
- [2] H. Wendt, S. Combrexelle, Y. Altmann, J.-Y. Tourneret, S. McLaughlin, P. Abry, "Multifractal analysis of multivariate images using gamma Markov random field priors," 2017. *submitted*.
- [3] R. Leonarduzzi, P. Abry, H. Wendt, K. Kiyono, Y. Yamamoto, E. Watanabe, J. Hayano, "Scattering Transform of Heart Rate Variability for the Prediction of Ischemic Stroke in Patients with Atrial Fibrillation," *Methods of Information in Medicine*, 2017. *to appear*.
- [4] H. Wendt, G. Didier, S. Combrexelle, P. Abry, "Multivariate Hadamard self-similarity: testing fractal connectivity," *Physica D*, vol. 356-357, pp. 1-36, 2017. [.pdf](#)
- [5] J. Frecon, N. Pustelnik, N. Dobigeon, H. Wendt, P. Abry, "Bayesian selection for the l2-Potts model regularization parameter: 1D piecewise constant signal denoising," *IEEE T. Signal Proces.*, vol. 65, no. 19, pp. 5215-5224, 2017. [.pdf](#)
- [6] R. Leonarduzzi, H. Wendt, P. Abry, S. Jaffard, C. Melot, "Finite resolution effects in p-leader multifractal analysis," *IEEE T. Signal Proces.*, 2017, vol. 65, no. 13, pp. 3359–3368. [.pdf](#)
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- [8] N. Pustelnik, H. Wendt, P. Abry, N. Dobigeon, "Combining local regularity estimation and total variation optimization for scale-free texture segmentation," *IEEE T. Computational Imaging*, vol. 2, no. 4, pp. 468–479, 2016. [.pdf](#)
- [9] T. Nakamura, K. Kiyono, H. Wendt, P. Abry, Y. Yamamoto, "Multiscale Analysis of Intensive Longitudinal Biomedical Signals and its Clinical Applications," *Proc. IEEE*, vol. 104, no. 2, pp. 242–261, 2016. [www](#)
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- [12] H. Wendt, N. Dobigeon, J.-Y. Tourneret, M. Albinet, C. Goldstein, N. Karouche, "Detection and Correction of Glitches in a Multiplexed Multi-channel Data Stream - Application to the MADRAS Instrument," *IEEE T. Geoscience and Remote Sensing*, vol. 54, no. 5, pp. 2803–2811, 2016. [www](#) | [.pdf](#)
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2 National Journals

- [26] H. Wendt, P. Abry, S.G. Roux, S. Jaffard, B. Vedel, "Analyse multifractale d'image: l'apport des coefficients dominants," *Revue Traitement du Signal*, vol. 25, no. 4–5, 2009. [.pdf](#)

3 International Conferences with Selection Panels

- [27] P. Ciuciu, H. Wendt, S. Combrexelle, P. Abry, "Spatially regularized multifractal analysis for fMRI Data," *International IEEE EMBS Conference (EMBC)*, Jeju (South Korea), July 2017. [.pdf](#)
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- [29] M. Le Goff, J.-Y. Tourneret, H. Wendt, M. Ortner, M. Spigai, "Deep Learning for Cloud Detection," *International Conference on Pattern Recognition Systems (ICPRS)*, Madrid (Spain), July 2017. [.pdf](#)
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- [31] R. Leonarduzzi, P. Abry, S. Jaffard, H. Wendt, L. Gournay, T. Kyriacopoulou, C. Martineau, C. Martinez, "P-Leader Multifractal Analysis for Text Type Identification," *IEEE Int. Conf. Acoust., Speech, and Signal Proces. (ICASSP)*, New Orleans (USA), March 2017. [.pdf](#)
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- [35] S. Combrexelle, H. Wendt, Y. Altmann, J.-Y. Tourneret, S. McLaughlin, P. Abry, "Bayesian joint estimation of the multifractality parameter of image patches using Gamma Markov Random Field priors," *IEEE Int. Conf. Image Proces. (ICIP)*, Phoenix (USA), Sept. 2016. [.pdf](#)
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- [38] F. Andersson, M. Carlsson, H. Wendt, "On a fixed-point algorithm for structured low-rank approximation and estimation of half-life parameters," *European Signal Processing Conference (EUSIPCO)*, Budapest (Hungary), Sept. 2016. [.pdf](#)

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- [40] M. Le Goff, J.-Y. Tourneret, H. Wendt, M. Ortner, M. Spigai, "Distributed Boosting for Cloud Detection," *IEEE Int. Geoscience Remote Sens. Symp. (IGARSS)*, Beijing (China), July 2016. [.pdf](#)
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4 National Conferences with Selection Panels

- [81] S. Combexelle, H. Wendt, J.-Y. Tournet, N. Dobigeon, S. McLaughlin, P. Abry, "Estimation bayésienne locale du paramètre de multifractalité à l'aide d'un algorithme de Monte Carlo Hamiltonien," *Coll. Sur le Traitement du Signal et des Images GRETSI 15*, Lyon (F), 2015. [.pdf](#)
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5 Book Chapters

- [90] P. Abry, S. Jaffard, R. Leonarduzzi, C. Melot, H. Wendt, “New exponents for pointwise singularities classification,” in Proc. Fractals and Related Fields III, 19-26 September 2015, Porquerolles, France, S. Seuret and J. Barral, Eds., 2017. *to appear*.
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6 Patents

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