

Herwig Wendt

Personal Information

- Status: Born September 9, 1979, in Steyr, Austria.
Austrian Nationality. Single.
- Country: France (residence and professional activity)
- Languages: *German* (mother tongue), *English* (fluent), *French* (fluent)
- URL: www.irit.fr/~Herwig.Wendt/

Career and Positions

- 2016-present: Research Associate, first class (tenured)
[National Council for Scientific Research](#) (CNRS)
- 2012-2015: Research Associate, second class (tenured) at CNRS
- 2012-present: Member of [SIGNAL AND COMMUNICATION](#) research team, [IRIT](#), [University of Toulouse](#), Toulouse, France
- 10-12/2010: Research Member, [Mathematical Sciences Research Institute](#), Berkeley, CA, USA
- 2008-2011: Postdoctoral Research Associate, [Department of Mathematics](#), [Purdue University](#), West Lafayette, IN, USA

Education and Diploma

- 2008: **Ph.D – Ecole Normale Supérieure (ENS) de Lyon, France**
Signal processing and Physics, with honors
- 2005: **Master – Vienna University of Technology, Austria**
Electrical Engineering – Signal processing and Telecommunications, with honors
- 2003: **Master Program, Chalmers University of Technology, Gothenburg, Sweden**

Honors and Awards

- 2017 Early Career Award, European Association for Signal Processing (EURASIP) received “*For Significant Contributions to Statistical Inference in Multivariate Multidimensional Multifractal Analysis*” [.www](#)
- 2016: Best Paper Award, *European Signal Processing Conference* (EUSIPCO) Budapest, Hungary. [.www](#)
- 2014: “Top 10% Paper Award”, *IEEE Int. Conference on Image Processing* (ICIP) Paris, France. [.www](#)
- 2009: Finalist of ASTI best Ph.D thesis award

Scientific Productions

- **Scientific Publications:** (exhaustive list: [.pdf](#))
H-index 14/13 — i10-index 21/18 — Total Citations 853/698
(since 2006/2012; source GoogleScholar 03.03.2017)
 - 21 research articles in international journals (peer reviewed)
 - 7 research articles as book chapters (peer reviewed)
 - 51 research articles in the proceedings of international conferences (peer reviewed)
 - 9 research articles in the proceedings of national conferences (peer reviewed)
 - 7 corporate technical reports
- **Patent:** *Procédé de détection et/ou de correction automatique d’erreurs dans un flux de données multiplexées - Method for automatic detection and/or correction of errors in multiplexed data stream*, French Pat. 13 55645 (filed 17.06.13, deliv. 17.02.17).
Inventors: J.-Y. Tourneret, H. Wendt, N. Dobigeon, *Promoters:* CNES (F) [.www](#)
- **Sharewares:** (details and MATLAB toolboxes: [.www](#))
 - [Wavelet Leader Multifractal Analysis](#)
 - [Bayesian Multifractal Analysis](#)
 - [Fractal Connectivity Test](#)

Teaching Activity

- 2012-present: Responsible for final year Master courses “*Estimation - Detection*” and “*Inverse Problems*” at [INP-ENSEEIH](#)T, Toulouse
~ 60 hours per year

Mentoring: Supervision of Graduate Students

– 4 PhD Students:

- [M. Valais](#) (F, *Structured Dictionary Learning*, 10/2019),
- [M. Le Goff](#) (F, *Cloud computing, Image classification*, 10/2017),
- [S. Combrexelle](#) (F, *Bayesian, Multifractal*, 10/2016),
- [O. Chabiron](#) (F, *Fast transform learning*, 10/2015: now developer at [Serious Game Research Lab](#) (F)).

Commissions, Boards, Scientific Community

- 2016-present *Associate Editor*, EURASIP Signal Processing
- 2013-present *Affiliate Member*, IEEE Signal Processing Society SPTM Technical Committee
- *Reviewer*: Major International Journals (IEEE Signal Proces. Mag., IEEE Trans. Image Proces., IEEE Trans. Signal Proces., IEEE Signal Proces. Lett., EURASIP Signal Proces., EURASIP J. Adv. Signal Proces., Elsevier ACHA,...) and Conferences (IEEE ICASSP, IEEE ICIP, IEEE SSP, EU-SIPCO, BSI, GRETSI, ...)

Workshop and Special Session Co-organization

- 06/2016 “*Multivariate statistical signal modeling and analysis*” [.www](#)
IEEE Stat. Signal Proces. Workshop (SSP) Special Session (co-organizer)
- 09/2015 “*Recent advances in multifractal analysis and applications*” [.www](#)
EURASIP European Signal Proces. Conf. (EUSIPCO)
Special Session (co-organizer)
- 06/2013 CIMI International *Image Processing Thematic School* [.www](#)
Saint-Lary, France (co-organizer)
- 06/2013 CIMI International *Optimization & Statistics in Image Processing* Workshop [.www](#)
Toulouse, France (member of organizing committee)

Communications to the non-specialist audience

- Giant fresco: 134m large fresco, conceived by CNRS and RATP (Paris public transport authority) and exposed in the corridor of the Paris Montparnasse subway station: multifractal analysis of Art Work (Fall 2015) [.www](#)
- Interview: Journal “Paul Sabatier”: multifractal analysis for historic photographic paper classification (03/2015) [.www](#)
- Article: Press communique of the Physics Institut of CNRS: multifractal analysis of historic photographic paper (08/2014) [.www](#)