

**BACHOC François** (ORCID: 0000-0001-5336-5714)Nationality: French, web site: <https://www.math.univ-toulouse.fr/~fbachoc/>

## • EDUCATION

## • CURRENT POSITION

Maître de conférences, IMT,  
UPS, Toulouse, France

2018	HDR, Université Paul Sabatier, Toulouse, France
2013	PhD, Université Paris Diderot, France
2010	MsC: Supélec, Centrale Paris, ENS Cachan, France

## • INTERNATIONAL RECOGNITION (honors, prizes)

- Member of European Laboratory for Learning and Intelligent Systems (ELLIS), 2022-  
Membership application is competitive and necessitates to be endorsed by two Fellows
- Recipient of the PEDR, 2017-

Salary bonus awarded on a competitive basis in French universities

- Lecturer (4h) at Machine Learning Summer School, Skoltech, Russia, 2019
- Lecturer (6h) at ETICS research summer school, France, 2016

## • SUPERVISION: 8 PhD students (5 on-going), 4 post-docs

• SCIENTIFIC PRODUCTION: <https://www.math.univ-toulouse.fr/~fbachoc/publications.html>

52 journal articles, 8 international conference proceedings, 1 R package, including Annals of Statistics, Bernoulli, Biometrika, SIAM, IEEE, NeurIPS, AISTAT oral

## • 5 MOST RELEVANT PAPERS (last 10 years), Google Scholar Id Fv36axgAAAAJ, h index 21, 1379 citations as of August 2023

1. Bachoc, F., López-Lopera, A. F. & Roustant, O. (2022). Sequential construction and dimension reduction of Gaussian processes under inequality constraints. SIAM Journal on mathematics of data science, 4(2), 772-800. <https://arxiv.org/abs/2009.04188> DOI: <https://doi.org/10.1137/21M1407513>
2. Bachoc, F., Genton, M. G., Nordhausen, K., Ruiz-Gazen, A. & Virta, J. (2020). Spatial blind source separation. Biometrika, 107(3), 627-646. <https://arxiv.org/abs/1812.09187> DOI: <https://doi.org/10.1093/biomet/asz079>
3. Bachoc, F., Preinerstorfer, D. & Steinberger, L. (2020). Uniformly valid confidence intervals post-model-selection. Annals of statistics, 48(1), 440-463. <https://arxiv.org/abs/1611.01043> DOI: <https://doi.org/10.1214/19-AOS1815>
4. Bachoc, F., Leeb, H. & Pötscher, B. (2019). Valid confidence intervals for post-model-selection predictors. Annals of statistics, 47(3), 1475-1504. <https://arxiv.org/abs/1412.4605> DOI: <https://doi.org/10.1214/18-AOS1721>
5. Bachoc, F. (2018). Asymptotic analysis of covariance parameter estimation for Gaussian processes in the misspecified case. Bernoulli, 24(2), 1531-1575. <http://arxiv.org/abs/1412.1926> DOI: <https://doi.org/10.3150/16-BEJ906>

## • EDITORIAL ACTIVITIES

- Since 2021, Associate Editor of Journal of Multivariate Analysis (<https://www.sciencedirect.com/journal/journal-of-multivariate-analysis>)
- Since 2013, 10 paper reviews per year for 30 different journals and the conferences NeurIPS and AAAI

## • COLLABORATIONS. INTERNATIONAL UNIVERSITIES: University of Vienna, Vienna University of Technology, University of Valparaíso, Imperial College of London, University of Newcastle, Cambridge University, University of Turku, University of Jyväskylä, University of Milan, Trinity College of Dublin, University of Potsdam, Weierstrass Institute Berlin, University of Freiburg, Ohio State University, University of Bern, University of Zurich. INDUSTRY: EDF, GéoHyd, Peugeot, Safran, Valeo, BRGM, CEA, IFPEN, IRSN, ONERA

## • FUNDING: PI of project ANR JCJC GAP (€205 000), local coordinator of projects OQUAIDO (€600 000), ANR BOLD (€270 000) and ANR BACKUP (€517 000), participant to 8 other projects (€110 000 to €1 000 000)

## • INSTITUTIONAL RESPONSABILITIES: at University Paul Sabatier, member of the “scientific concil”, member of the “partnerships service”, in charge of 3 teaching programs

## • TEACHING ACTIVITIES: about 160 teaching hours per year, department of mathematics. Bachelor and master levels. Applied mathematics, applied probability, statistics, machine learning, deep learning, R and Python