

Fauvel Mathieu (ORCID: 0000-0002-3304-6932)

Nationality: French



- **CURRENT POSITION**

Chargé de Recherche, INRAe,
CESBIO, Toulouse, France.

- **EDUCATION**

- 2023 HDR, University of Toulouse France
- 2007 PhD, Grenoble National Polytechnical Institute and University of Iceland
- 2004 MsC (Engineer): Grenoble National Polytechnical Institute, France

- **INTERNATIONAL RECOGNITION (honors, prizes)**

- 2016, Best chapter award jointly from the Geoscience and Remote Sensing Society, and the IEEE France Section.
- 2015, INP INNOV award for scientific insights for the MUESLI project.
- 2012, Best reviewer award, IEEE Transaction on Geoscience and Remote Sensing.
- 2013, Recipient of the IEEE GRSS 2013 Transactions Prize Paper Award for the paper : « Spectral and Spatial Classification of Hyperspectral Data Using SVMs and Morphological Profile » M. Fauvel, J. A. Benediktsson, J. Chanussot and J. R. Sveinsson IEEE Transaction on Geoscience and Remote Sensing, vol. 46, n° 11, pages 3804-3814, November, 2008.

- **SUPERVISION:** 9 PhD students (1 on-going), 5 post-Docs and 7 Engineers

- **SCIENTIFIC PRODUCTION:** <https://scholar.google.com/citations?user=rzznG2UAAAAJ&hl=en>

- **5 MOST RELEVANT PAPERS (10 last years), Google Scholar Id: rzznG2UAAAAJ, h index: 31**

- Mathieu Fauvel, Yuliya Tarabalka, Jon Atli Benediktsson, Jocelyn Chanussot, James Tilton. Advances in Spectral-Spatial Classification of Hyperspectral Images. *Proceedings of the IEEE*, 2013, 101 (3), pp.652-675. ([10.1109/JPROC.2012.2197589](https://doi.org/10.1109/JPROC.2012.2197589)).
- Mathieu Fauvel, Mailys Lopes, Titouan Dubo, Justine Rivers-Moore, Pierre-Louis Frison, Nicolas Gross, Annie Ouin, Prediction of plant diversity in grasslands using Sentinel-1 and -2 satellite image time series, *Remote Sensing of Environment*, Volume 237, 2020, <https://doi.org/10.1016/j.rse.2019.111536>.
- A. Lagrange, M. Fauvel and M. Grizonnet, "Large-Scale Feature Selection With Gaussian Mixture Models for the Classification of High Dimensional Remote Sensing Images," in *IEEE Transactions on Computational Imaging*, vol. 3, no. 2, pp. 230-242, June 2017, doi: 10.1109/TCL.2017.2666551.
- T. Uezato, M. Fauvel and N. Dobigeon, "Hyperspectral Unmixing With Spectral Variability Using Adaptive Bundles and Double Sparsity," in *IEEE Transactions on Geoscience and Remote Sensing*, vol. 57, no. 6, pp. 3980-3992, June 2019, doi: 10.1109/TGRS.2018.2889256.
- V. Bellet, M. Fauvel and J. Inglada, "Land Cover Classification With Gaussian Processes Using Spatio-Spectro-Temporal Features," in *IEEE Transactions on Geoscience and Remote Sensing*, vol. 61, pp. 1-21, 2023, Art no. 4400221, doi: 10.1109/TGRS.2023.3234527.
- Constantin, A., Fauvel, M. & Girard, S. Mixture of multivariate Gaussian processes for classification of irregularly sampled satellite image time-series. *Stat Comput* **32**, 79 (2022). <https://doi.org/10.1007/s11222-022-10145-8>

- **EDITORIAL ACTIVITIES**

- Since 2018, Associate Editor of the IEEE Transactions on Geoscience and Remote Sensing
- Since 2018, Session Organizers (Data analysis methods) of the IEEE International Geoscience and Remote Sensing Symposium
- Between 2015 and 2018, Associate Editor of the IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing
- Between 2013 and 2016, president of the IEEE Geoscience and Remote Sensing Society French Chapter,

- **COLLABORATIONS:** Statify, Inria.

- **TEACHING ACTIVITIES (current or planned):** Lectures on Machine Learning applied to geoscience and remote sensing