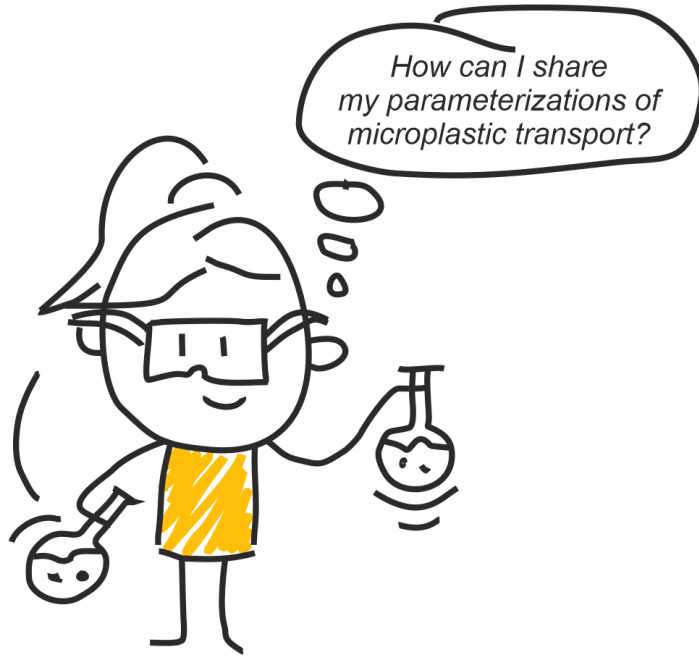


A tool for scientific collaboration, reproducible
analyses and interactive publications:
FastResearch.io

Kryss Waldschläger & Michael von Papen



Why?



Store and share your data!

- Upload data and datasets
- Link datasets to analyses
- Include metadata



Data Management

Upload and manage your [datasets](#), then share with your coworkers.

Your data is safe!



Secure & Private

Control access to your data
with fine-grained permissions.

- Server is hosted in the Netherlands
- Controlled access: private, partially public or public
- Modify or revoke your shares: viewer, contributor or admin

Improve the usability of your research results!

- Analyses can be coded in any programming language, curated software environment for Python and R
- Create projects that include data, analyses and metadata, a description and a QR code
- Easily accessible and usable - just copy an analysis you like and use it on your own dataset



Reproducible Publications

Publish your work as
interactive and reproducible
projects

Work together for better results!

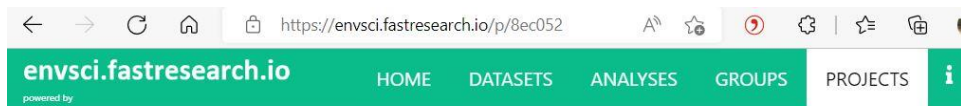


Collaborative Analyses

Analyze your data with Jupyter notebooks and collaborate in groups.

- Everything is stored and processed in one place, everyone has the same version (no more consistency problems!)
- New way of collaborating with Jupyter Lab 3.0

How can you use it?



Fluvial Microplastic Transport



Fluvial Microplastic Transport

Microplastics are known to be ubiquitous contaminants and although our knowledge about them is constantly increasing, we know little about the basic transport processes of microplastics in the aquatic environment.

Here, we focus on the settling and rising behaviour of microplastics in a stable water column, which is highly important for the distribution of microplastics in the aquatic environment. In the analysis, the settling and rising velocities of several microplastic particles are determined using the data and calculations from Waldschläger & Schüttrumpf (2019) (DOI: [10.1021/acs.est.8b06794](https://doi.org/10.1021/acs.est.8b06794)) and the results are compared to empirically determined settling and rising velocities.



Datasets



Settling and rise velocities of pristine microplastic particles Generic Data



Analyses



Correlation analysis of settling and rise velocities of plastic particles Generic Analysis



System

Owner



Kryss Waldschläger (Wageningen University)

Disclaimer

- Just launched a few weeks ago
- Still in beta version
- Still some bugs, but general functionality is given
- Feedback is welcome!
- Based on fastgenomics.org, a platform for single cell transcriptomics by Comma Soft AG



FastResearch: Your Platform for Collaboration & Reproducibility



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@KryssWald



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