# F. Paul Spitzner

Franz Paul Spitzner

Somewhere down the line of my studies I realized that I love to code and to tinker with tech—sometimes more than doing the actual research. I also love to write and to create figures that make people understand all the crazy things we come up with.

What's it all about if not making science accessible to everyone?

## Personal Information


**Address**
Am Faßberg 17
37077 Göttingen

**Date of Birth**
December 23 1990

**Email**
paul.spitzner@ds.mpg.de


## Hobbies and Passion

- **Cycling**
- **Photography**
- **Webdesign**
- **Clean Code**
- **Coffee Breaks**
- **Open Source Software**

## Research Experience

### Max Planck Institute for Dynamics and Self-Organization

2020 • PhD Student

PhD Project: *Combining modularity with stimulation to tune small neuronal systems more brain-like*

2018–2019 • Intern (via a scholarship)

Developing the open-source Python toolbox *MR. Estimator*

### SmartStart: The Joint Training Program in Computational Neuroscience

2019–2020 • Student (preparing the PhD project)

Working with *in vitro* cultures during six months of lab rotation at the Soriano lab, University of Barcelona

Modeling of neuronal cultures and programming *in silico* simulations in the Priesemann group, MPIDS Göttingen

### Leipzig University

2017–2018 • Scientific Researcher

Working on a finite-size scaling study of equilibrium phase transitions

### Leibniz Institute for Tropospheric Research

2015–2017 • Research Assistant (part time)

Developing an atmospheric model using OpenCL that runs on GPUs and heterogeneous computing environments

## Education

### Master of Science · Leipzig University

2017 • International Physics Studies Program

Thesis title: *Two Perspectives on the Condensation-Evaporation Transition of the Lennard-Jones Gas in 2D*

### Bachelor of Science · Leipzig University

2015 • International Physics Studies Program

Thesis title: *Generating Long-range Power-law Correlated Disorder*

## Character

- Open-minded
- Self-motivated
- Organized
- Meticulous
- Solution-oriented

## Soft Skills

- Attention to Detail
- Critical Thinking
- Project Management
- Teamwork
- Leadership

## Communication

- Conflict Resolution
- Interactive Drafting
- Scientific Writing
- Figure Making
- Posters and Presentations

## Languages

- German *native*
- English *fluent*
- Spanish *intermediate*

## Programming, Software and Tools

- Python
- C++
- Julia
- OpenCL
- MPI
- HTML & CSS
- JavaScript
- PHP
- Bootstrap
- Git
- Serif Affinity Designer
- Adobe Photoshop
- Apple Final Cut Pro
- Inkscape
- Matplotlib
- LaTeX
- Markdown
- Apple iWork
- Open Office
- Microsoft Office

## Outreach

**Website**
https://makeitso.one

**GitHub**
pSpitzner

**Twitter**
PaulSpitzner

## Research Links

**Google Scholar**

**ORCID**

**arXiv**

## References

**Viola Priesemann**

**Johannes Zierenberg**

## Training and Development

Attended workshops and conferences on computational physics, neuroscience and scientific writing

Organized group retreats and workshops

Presented seminars and workshops on illustration and scientific writing

Supervised Bachelor students for their theses

Internships and part-time jobs involving sales, programming, product design and project management

## Selected Publications

**Spitzner et al. 2021 · Plos one**
*MR. Estimator, a toolbox to determine intrinsic timescales from subsampled spiking activity*

**Contreras et al. 2021 · Nature communications**
*The challenges of containing SARS-CoV-2 via test-trace-and-isolate*

**Dehning et al. 2020 · Science**
*Inferring change points in the spread of COVID-19 reveals the effectiveness of interventions*

**Spitzner et al. 2018 · SciPost Physics**
*The droplet formation-dissolution transition in different ensembles: Finite-size scaling from two perspectives*

**Zierenberg et al. 2017 · Physical Review E**
*Percolation thresholds and fractal dimensions for square and cubic lattices with long-range correlated defects*