

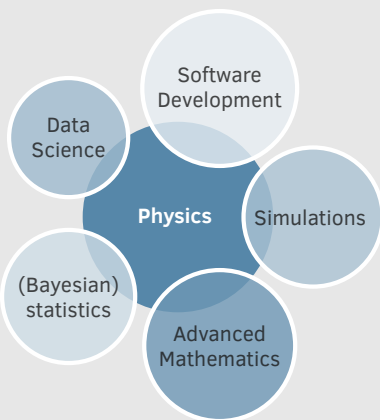


# Stefan Hackstein, PhD

Physicist, Statistician

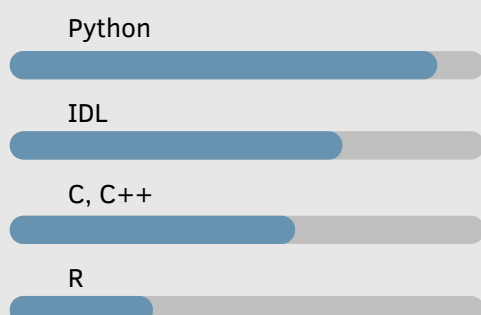
- February 12th, 1990
- Horner Landstr. 372, 22111 Hamburg, Germany
- +49 (0)177 516 2131
- stefan.hackstein@hs.uni-hamburg.de
- German

## Hard Skills



- git
- Linux
- parallel computing
- data visualization
- scientific writing
- teaching
- Monte-Carlo experiments
- work planning
- LaTeX
- MS-Office

## Programming



## Working Experience

- 2015 – 2020 **Research associate** Universität Hamburg  
Conducting and executing research plans. Writting software for data analysis and model evaluation. Performing simulations of physical models. Evaluating results by statistical comparison to observations.
- 2007 – 2009 **Office administrator** Tiefbau Janßen GmbH & Mercator Berufskolleg  
Filing orders and customer data. Measuring construction sites. Preparing proposals.

## Education

### Study

- 2017 – 2020 **PhD in Physics** Universität Hamburg  
Focus: high-energy astrophysics, computational cosmology, Bayesian statistics.  
**PhD Thesis** ( $\emptyset 1, 0$ )  
“Measure cosmic magnetic fields with extreme astrophysical messengers”
- 2015 – 2017 **MSc Physics** Universität Hamburg  
Focus: particle physics & astrophysics  
**Master Thesis** ( $\emptyset 1, 0$ )  
“On the propagation of ultrahigh-energy cosmic rays in the local Universe”
- 2011 – 2015 **BSc Physics** Universität Hamburg  
Focus: particle physics & astrophysics  
**Bachelor Thesis** ( $\emptyset 1, 0$ )  
“Ultrahigh-energy cosmic rays and the study of cosmic magnetism”

### School

- 2009–2010 **Abitur** Max-Weber-Berufskolleg  
Focus: maths, business administration

## Teaching

- 2017–2019 **teaching university classes** Universität Hamburg  
quantum physics & theoretical physics
- 2019 Tutoring high school students in experiments Universität Hamburg
- 2013–2015 **Tutor** Universität Hamburg  
quantum physics & theoretical physics

## Awards

- 2018 Award for best teaching Universität Hamburg

## Extra-Curricular Activities

- 2020 Organizing scientific focus-session [www.astro.ru.nl/imagine](http://www.astro.ru.nl/imagine)
- 2018 preparing and executing public experiment
- 2010 – 2011 Traveling Europe

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## Social Network



LinkedIn Profile



GitHub Publications

## Languages



German



English



## Soft Skills



independence



output-driven



motivated



proactive



focused



inquisitive



communication



collaborative



expressive

## Publications

- 2020, subm. **Fast radio burst redshift distribution and the missing baryons**  
Hackstein, S., Brüggen, M., Vazza, F.  
Monthly Notices of Royal Astronomical Society
- 2020 **Redshift estimates for fast radio bursts and implications on intergalactic magnetic fields**  
Hackstein, S., Brüggen, M., Vazza, F., Rodrigues, L. F. S.  
MNRAS
- 2020 **PreFRBLE: Probability Estimates for Fast Radio Bursts to obtain model Likelihood Estimates**  
Hackstein, S.  
<https://github.com/shackste/PreFRBLE>
- 2019 **Fast radio burst dispersion measures and rotation measures and the origin of intergalactic magnetic fields**  
Hackstein, S., Vazza, F., Brüggen, M., Gaensler, B. M., Heesen, V.  
MNRAS
- 2019 **Propagation of UHECRs in the local Universe and origin of cosmic magnetic fields**  
Hackstein, S., Vazza, F., Brüggen, M., Sorce, J. G., Gottlöber, S.  
Proceedings of IAU Focus Meeting 8
- 2020 **Simulations of ultra-high Energy Cosmic Rays in the local Universe and the origin of Cosmic Magnetic Fields**  
Hackstein, S., Vazza, F., Brüggen, M., Sorce, J. G., Gottlöber, S.  
MNRAS
- 2016 **Propagation of ultrahigh energy cosmic rays in extragalactic magnetic fields: a view from cosmological simulations**  
Hackstein, S., Vazza, F., Brüggen, M., Sigl, G., Dundovic, A.  
MNRAS

September 28, 2020

Stefan Hackstein, PhD