

# RÉSUMÉ

## Personal information

**Full Name** Jonas Jansen  
**Address** Sölvegatan 18 A,  
223 62 Lund  
**Born** October 25, 1992, Aachen, Germany  
**Webpage** <https://jonas-jansen.github.io>  
**Email address** [jonas.jansen@math.lth.se](mailto:jonas.jansen@math.lth.se)

## Professional Appointments and Employment

**Oct. 2022 - Present** Postdoctor – LTH, Lunds Universitet

**Apr. 2018 - Sep. 2022** Wissenschaftlicher Mitarbeiter – Rheinische Friedrich-Wilhelms-Universität Bonn

## Studies and Education

**Apr. 2018 - Sep. 2022** Ph.D. student in Mathematics – Rheinische Friedrich-Wilhelms-Universität Bonn

*Thesis: Flows of Viscous Fluids: Fluctuations for Stochastic Homogenisation in Perforated Domains, and Non-Newtonian Thin-Film Models*  
*Ph.D. advisor: Prof. Dr. Juan J. L. Velázquez*

**Apr. 2015 - Jan. 2018** M. Sc. in Mathematics – Rheinische Friedrich-Wilhelms-Universität Bonn

*Thesis: Renormalization group methods for Stochastic PDEs*  
*Supervisor: Prof. Dr. Massimiliano Gubinelli*

**Apr. 2012 - Mar. 2015** B. Sc. in Mathematik – RWTH Aachen University

*Thesis: Large deviations für eine Vlasov-Fokker-Planck Gleichung*  
*Supervisor: Prof. Dr. Michael Westdickenberg*

**Oct. 2011 - Mar. 2012** History studies – Humboldt-Universität zu Berlin

## Publications and Preprints

### Journal articles

J. Jansen, C. Lienstromberg, and K. Nik. “Long-Time Behavior and Stability for Quasilinear Doubly Degenerate Parabolic Equations of Higher Order”. In: *SIAM Journal on Mathematical Analysis* (2023). Publisher: Society for Industrial and Applied Mathematics, pp. 674–700

### Preprints

G. Brüll, B. Hilder, and J. Jansen. “Thermocapillary Thin Films: Periodic Steady States and Film Rupture”. In: *arXiv:2308.11279* (2023)

P. Gladbach, J. Jansen, and C. Lienstromberg. “Non-Newtonian thin-film equations: global existence of solutions, gradient-flow structure and guaranteed lift-off”. In: *arXiv:2301.10300 [math]* (2023)

R. M. Höfer and J. Jansen. “Convergence rates and fluctuations for the Stokes-Brinkman equations as homogenization limit in perforated domains”. In: *arXiv:2004.04111 [math]* (2022)

## Organized Events

- 2024** Minisymposium on *Pattern-forming Systems and Asymptotic Models* at EquaDiff 2024 together with Bastian Hilder, and Guido Schneider.
- 2020** Workshop on *The Mathematical Theory of Particle Suspensions* funded by SFB1060 together with Arianna Giunti, Richard Höfer, and Juan J. L. Velázquez.

## Invited Talks

- 2023** Workshop Analysis and numerics of nonlinear PDEs: degeneracies & free boundaries, Lorentz Center Leiden
- 2023** Oberseminar Nichtlineare Differentialgleichungen, Universität Stuttgart
- 2021** 15th International Conference on Free Boundary Problems  
*Minisymposium on Asymptotic approaches to interface dynamics*, online
- 2020** DMV Jahrestagung 2020  
*Minisymposium on PDEs in Fluid Dynamics*, online

## Teaching

### Lund

- 2023** Reading Course: *Resonances in Dynamical Systems*  
Mathematics Communication (Project). Module leader: Niels-Christian Overgaard

### Bonn

- 2018** Teaching Assistant for Courses: Analysis I, Analysis III, Introduction to PDE,  
- Functional Analysis, PDE & Modelling, Nonlinear PDE I, and Nonlinear PDE II
- 2022** Undergraduate Seminar: Fourier Multipliers and Pseudodifferential Operators  
Graduate Seminar on Fluid Dynamics

## Further interests and qualifications

- 2022** Workshops on *Social Media für die Wissenschaft – Wie ich Forschung präsentieren kann*, *How to Start Your Podcast in Science Communication*, and *Communicating Science*, part of the Doctorate Plus program of the University Bonn
- 2016** Studienstiftung des deutschen Volkes e.V. Summer Academy  
*Unendliches erzählen. Moderne Mathematik in der Literatur des 20. Jahrhunderts*, Neubeuern

Lund, August 24, 2023

Jonas Jansen