





Marius Winkler | PH.D. CANDIDATE

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HIGHER EDUCATION

MAX-PLANCK-INSTITUT FÜR METEOROLOGIE | PH.D. CANDIDATE IMPRS-ESM

March 2021 – Current | Hamburg, Germany

- **Topic:** "Boundary layer wind balances and their influence on equatorial sea-surface temperatures."
- **Supervisors:** Prof. Dr. Juan Pedro Mellado González (UHH), Prof. Dr. Bjorn Stevens (MPI-M, UHH)
- **Emphases:** Climate Physics, Fluid Dynamics, Boundary Layer, Computational Physics, Numerical Simulation

ÉCOLE NORMALE SUPÉRIEURE DE PARIS & TECHNISCHE UNIVERSITÄT BERLIN | M.SC. THEORETICAL PHYSICS

October 2018 – October 2020 | Paris, France & Berlin, Germany

- **Master's thesis:** "Phase Response Approaches to Neural Activity Models with Delay"
- **Supervisors:** Research Director CNRS, Dr. Boris Gutkin, Ph.D., HDR (ENS Paris), Prof. Dr. Dr.h.c. Eckehard Schöll, Ph.D. (TU Berlin)
- **Emphases:** Neuroscience, Nonlinear Dynamics and Control, Colloidal Systems, Advanced Quantum Mechanics, Advanced Optics
- **Grade:** 1.1 ("very good")

TECHNISCHE UNIVERSITÄT BERLIN | B.Sc. PHYSICS

October 2014 – November 2018 | Berlin, Germany

- **Bachelor's thesis:** "Synchronization of chimera states in multiplex networks of logistic maps"
- **Supervisor:** Prof. Dr. Dr.h.c. Eckehard Schöll, Ph.D.
- **Emphases:** Quantum Mechanics, Thermodynamics, Statistical Physics, Optics, Electrodynamics, Mechanics, Solid State and Molecular Physics, Mathematics
- **Grade:** 1.3 ("very good")

SCIENTIFIC CONTRIBUTIONS

PUBLICATIONS

- **Winkler, M., et al.**, "Phase response approaches to neural activity models with distributed delay." Biol Cybern, December 2021.
doi.org/10.1007/s00422-021-00910-9.
- **Winkler, M., et al.**, "Relay synchronization in multiplex networks of discrete maps." EPL, Vol. 126, Nr. 5, July 2019, p. 50004.
doi:10.1209/0295-5075/126/50004.

CONFERENCES

- Dynamics of Coupled Oscillator Systems Workshop, Weierstrass Institute for Applied Analysis and Stochastics, Berlin, 19-21 November 2018
- International Conference on Control of Self-Organizing Nonlinear Systems, Rostock, Germany, 9-13 September 2018

POSTERS

- Phase Response Approaches to Neural Activity Models with Delay, Dynamics Days Digital 2020
- Relay Synchronization in Multiplex Networks of Discrete Maps, DPG Spring Conference, Regensburg 2019
- Bachelor Symposium, Young German Physical Society, Berlin 2018

SKILLS

PROGRAMMING

Proficient:

Python • Xarray • Numpy •
Mathematica

Experienced:

CDO • Linux • L^AT_EX • MS Office

Familiar:

Julia • C++/C

LANGUAGES

C2:

German

C1:

English • French

Proficiency Certificate

Latin

AWARDS

- ERASMUS+ Scholarship,
10/2019-03/2020
- PROMOS Scholarship (DAAD),
04/2020-06/2020
- ERASMUS+ Scholarship,
09/2016-08/2017

COURSEWORK

- **The Greenhouse Effect and Earth's Climate Sensitivity** by Prof. Dr. Bjorn Stevens (MPI-M)
- **Advanced Topics in Atmospheric Dynamics** by Prof. Dr. Volkmar Wirth (JGU Mainz)
- **Introduction to Earth Systems Science and Modelling** by Prof. Dr. Viktor Brovkin (UHH) and Bjorn Stevens (MPI-M, UHH)
- **Introduction to Theoretical Meteorology** by Prof. Dr. Nedjeljka Žagar (UHH)

WORKING EXPERIENCE

- **Teaching Assistant** of the experimental physics lecture given by Prof. Dr. Dähne,
01/2018-09/2019
- **Journeyman Bespoke Shoemaker** at Schuhmacherei Hans-Joachim Vauk,
09/2012-08/2014,
Grade: "very good"