Marius Schneider — Curriculum Vitae

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Education

09/2019 – present
PhD Student
Computational and Systems Neuroscience
Research Advisor: Dr. Martin Vinck
Ernst Strüngmann Institute for Neuroscience in Cooperation with Max Planck Society, Frankfurt

10/2016 – 04/2019
MSc. in Physics
Master Thesis in Computational Neuroscience
Research Advisor: Dr. Hermann Cuntz
Grade 1.1 Ranging from 1 (excellent) to 6 (insufficient)
Frankfurt Institute of Advanced Science
Goethe University, Frankfurt

10/2012 – 10/2016
BSc. in Physics
Bachelor Thesis in Nuclear Physics
Research Advisor: Prof. Dr. Reinhard Dörner
Grade 1.7 Ranging from 1 (excellent) to 6 (insufficient)
Goethe University, Frankfurt

Work Experience

11/2018 – 09/2019
Research Assistant
Prof. Dr. Peter Jedlicka
Computational Neuroscience
Justus Liebig University, Gießen

04/2018 - 10/2018
Research Assistant
Dr. Hermann Cuntz
Computational Neuroscience
Frankfurt Institute for Advanced Studies, Frankfurt

11/2016 - 03/2018
Research Assistant
Prof. Dr. David Poeppel
MEG recordings and preprocessing
Max Planck Institute for empirical aesthetics, Frankfurt

06/2017 - 10/2017
Accelerator Operator
Dr. Hans-Eberhard Zschau
Assistant at linear particle accelerator
Goethe University, Frankfurt

Courses

08/2022	IBRO-Simons Computational Neuroscience Imbizo, Cape Town, South Africa
08/2021	Neuromatch Academy for Deep Learning, Online, Worldwide
01/2020	EITN Workshop on Modeling brain signals, Paris, France
06/2019	2019 NEURON Summer Course, University of Minnesota, Minneapolis
09/2018	Neural Dynamics Summer School Bristol, UK

Teaching Experience

07/2022	Teaching Assistant Neuromatch Academy: Computational Neuroscience
08/2019	Teaching Assistant "Modeling Healthy and Diseased Brain: From Dendrites to Neurons and Networks" 7th Baltic-Nordic School on Neuroinformatics BNNI 2019, Frankfurt
05/2019 – 08/2019	Bachelor thesis supervision
01/2018 - 07/2018	*Teaching Assistant* Computational Neurobiology Course Goethe University, Frankfurt

Grants and Awards

09/2019 - present	PhD research fellowship International Max Planck Research School (IMPRS) for Neural Circuits, Frankfurt
07/2019	Travel Grant of Organization for Computational Neurosciences for CNS conference, Barcelona
09/2018	Funded position at Neural Dynamics Summer School Bristol, UK
09/2015 - 09/2016	German National Scholarship
06/2011	Award for excellent high school degree in physics, German Physical Society

Invited Talks

06/2022	Bernstein Center of Computational Neurosciences (BCCN), Berlin

Conference Presentations

Schneider M, Broggini A, Dann B, Tzanou A, Uran C, Sheshadri S, Scherberger H, Vinck M (2021) A mechanism for inter-areal coherence through communication based on connectivity and oscillatory power. Neuromatch Conference, Online. Oral Presentation.

Schneider M, Jedlicka P, Cuntz H (2019) High dimensional ion channel composition enables robust and efficient targeting of realistic regions in the parameter landscape of neuron models. CNS conference, Barcelona. Poster.

Schneider M, Jedlicka P, Cuntz H (2018) Ion channel diversity enables robust and flexible targeting of realistic regions in the parameter landscape of dentate granule cell models. 3R Centre Kick-off symposium, Gießen. Poster

Publications

Schneider M, Broggini A, Dann B, Tzanoua A, Uran C, Sheshadri S, Scherberger H, Vinck M (2021) A mechanism for inter-areal coherence through communication based on connectivity and oscillatory power. **Neuron** https://doi.org/10.1016/j.neuron.2021.09.037

Cuntz H, Bird A, Beining M, **Schneider M**, Mediavilla L, Hoffmann F, Deller T, Jedlicka P (2021) A general principle of dendritic constancy – a neuron's size and shape invariant excitability. **Neuron** https://doi.org/10.1016/j.neuron.2021.08.028

Schneider M, Gidon A, Triesch J, Jedlicka P, Cuntz H (2021) Biological complexity facilitates tuning of the neuronal parameter space. **bioRxiv** https://doi.org/10.1101/2021.05.04.442120

Further Qualifications

Language Skills:	German (mother tongue), English (fluent), French (basics)
Computer Skills:	Matlab, Python, C++, TensorFlow, Pytorch, Psytoolbox, Fieldtrip, Neuron, Adobe Illustrator, LaTeX
Other Research Skills:	MEG, MRT, EEG