



CURRICULUM VITAE – ANDREAS SCHACHNER

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PROFESSIONAL CAREER

Research Associate | *Four year postdoctoral position* | *Collaborative Initiative* Since 09/2022
Cornell University, Ithaca, USA and Ludwig-Maximilian-University of Munich, Germany

Research Associate funded by Exposé Scholarship of the Studienstiftung 03/2019 – 09/2019
U. of Wisconsin-Madison, USA, U. of Heidelberg, Germany, and ICTP, Trieste, Italy

EDUCATION AND RESEARCH EXPERIENCE

Doctor of Philosophy (Ph.D.) | *Applied Mathematics* | *Award date: 11/07/2022* 10/2019 – 08/2022
University of Cambridge, England

Master of Science (M.Sc.) | *Physics* | *Distinction (1.0)* 08/2015 – 02/2019
Ruprecht Karl University of Heidelberg, Germany

Master of Advanced Studies (MASt) | *Applied Mathematics* | *Distinction* 10/2016 – 07/2017
University of Cambridge, England

Bachelor of Science (B.Sc.) | *Physics* | *Distinction (1.0)* 09/2012 – 07/2015
Ruprecht Karl University of Heidelberg, Germany

COLLABORATIONS

Towards de Sitter Space in String Theory Since 03/2025
funded by DFG (project number: 552080800, PI: Prof. A. Hebecker, Heidelberg University)

Topology from cosmology: axions, astrophysics, and machine learning Since 09/2023
funded by Leverhulme Trust (PI: Prof. D. Marsh, King's College London)

CA21106 - COSMIC WISPerS in the Dark Universe: Theory, astrophysics and experiments Since 04/2024
funded by COST EU, Action Chair: Prof. A. Mirizzi, U. of Bari
working group *WG1: WISPerS Model Building* led by Prof. M. Cicoli, U. of Bologna

SUPERVISION AND TEACHING EXPERIENCE

Co-Supervision of students

- Gaetano Sifo (PhD student) | *Supervisor: Prof. A. Hebecker* since 09/2025
- Federico Compagnin (PhD student) | *Supervisor: Prof. L. McAllister* Since 08/2024
- Julian Ebel (Master student) | *Supervisor: Dr. S. Krippendorff* 08/2023 – 07/2024
- Elijah Sheridan (PhD student) | *Supervisor: Prof. L. McAllister* Since 03/2023
- Nate MacFadden (PhD student) | *Supervisor: Prof. L. McAllister* Since 10/2022
- Abhishek Dubey (Master student) | *Supervisor: Dr. S. Krippendorff* 08/2022 – 08/2023
- Christopher Hughes (PhD student) | *Supervisor: Prof. F. Quevedo* 10/2020 – 06/2025

Lectures on ML Techniques in the String Landscape at the Avogadro Meeting 2024 12/2024
Complesso dei Santi Marcellino e Festo, Napoli, Italy

Teaching assistant for two graduate lectures and two lab courses 09/2023 – 07/2025
Ludwig Maximilian University of Munich, Germany

Teaching assistant for five graduate lectures in Part III 09/2019 – 06/2022
University of Cambridge, England

Teaching assistant for one graduate and three undergraduate lectures 09/2015 – 08/2018
Ruprecht Karl University of Heidelberg, Germany

Book entitled *Lectures on the Standard Model* with Prof. F. Quevedo
Under Contract with Cambridge University Press, revisions due 02/2026

spring 2027

Preparation of lectures, and lecture material

- *TASI lectures on de Sitter Vacua (to appear)* | Lecturer: Prof. L. McAllister 03/2025 – 10/2025
- *The Standard Model (arXiv: 2409.09211)* | Lecturer: Prof. F. Quevedo 01/2020 – 09/2024
- *Mathematical Methods in Physics 1* | Lecturer: Prof. M. Salmhofer 03/2016 – 08/2016

SCHOLARSHIPS AND AWARDS

Scholarships

- PhD scholarship of the German Academic Scholarship Foundation (GASF) 03/2020 – 07/2022
- STFC studentship awarded by DAMTP at the University of Cambridge 10/2019 – 07/2022
- Helen Stone Scholarship at the University of Cambridge awarded by Cambridge Trust 10/2019 – 02/2020
- Exposé scholarship of the GASF supporting ambitious research prior to a PhD 03/2019 – 08/2019
- Scholarship of the GASF supporting the education of exceptional academic talents 03/2013 – 12/2018

Prizes and Awards

- Smith-Knight and Rayleigh-Knight Prize for essay on α' -corrections in string theory 04/03/2021
- Otto-Haxel Prize for “an outstanding theoretical Master’s thesis” 01/10/2019
- E.M. Burnett Prize for excellent results in Part III awarded by Hughes Hall 01/10/2017

INVITED TALKS, REVIEWING, AND PUBLIC ENGAGEMENT

Selected plenary and seminar talks

- String Data 2025 in London, UK 08/12/2025
- 14th Crete Regional Meeting on String Theory Crete, Greece 24/06/2025
- Prospects for the String Axiverse in Banff, Canada 17/01/2025
- String Phenomenology 2024 24/06/2024
- Geometry, Strings and the Swampland Program at Ringberg Castle, Germany 22/03/2024
- Colloquium at ITP, University of Heidelberg, Germany 08/02/2024
- ML4Jets 2023 (ML applications to HEP experiment and theory) 09/11/2023

Organisation of seminars and conferences

- Parallel sessions on *QFT and String Theory* at EPS-HEP conference 2025 02/2025 – 07/2025
- String theory group seminars at LMU Munich 09/2023 – 08/2025

Reviewing

- *Journal of High Energy Physics* (publisher: Springer) Since 11/2024
- *Physics Letters B* (publisher: Elsevier) Since 04/2025
- *Neural Information Processing Systems (NeurIPS)* (conference on AI for physics) Since 09/2022
- *Machine Learning: Science and Technology* (journal publisher: IOPscience) Since 05/2024

Public Engagement and Outreach

- Participation in GASF meetings to promote interdisciplinary scientific exchange Since 03/2013
- Involvement in the Accelerate Programme for Scientific Discovery 10/2019 – 06/2022
- Organisation of cross-disciplinary events as part of Trinity Hall student committee 09/2019 – 08/2020

SKILLS AND HOBBIES

Languages: German (Native), English (Fluent, TOEFL: 116), French (Elementary)

Hobbies: Latin ballroom dancing (formation and couples), playing trumpet, hiking, acrobatics

Programming: Python (NumPy, JAX, SciPy, Matplotlib, Pandas, Tensorflow, Pytorch, Bokeh, PySR), C++

Other software: Mathematica, Sage, CYTools, CohomCalc, Matlab