Niklas Reinhardt
Curriculum Vitae

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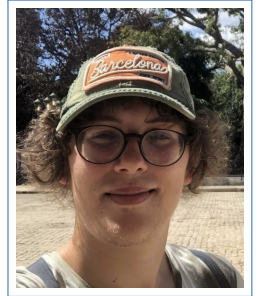in *Niklas Reinhardt*
○ *NiklasReinhardt99*
Date of birth: 19.10.1999
Place of birth: Nagold
Nationality: German citizen

Education

01/2024–	**PhD**, *Heidelberg University*, Topic: Statistical Learning in Infinite Dimensions, Supervisors: Jakob Zech (Heidelberg University), Sven Wang (EPFL).
03/2021–10/2023	**M. Sc. Mathematics**, *Heidelberg University*, Final grade: 1.0
03/2021–06/2023	**M. Sc. Physics**, *Heidelberg University*, Final grade: 1.0
04/2018–02/2021	**B. Sc. Mathematics**, *KIT*, Karlsruhe, Final grade: 1.1
10/2017–02/2021	**B. Sc. Physics**, *KIT*, Karlsruhe, Final grade: 1.1
10/2015–07/2017	**Gymnasium**, *Otto-Hahn-Gymnasium*, Nagold, Final grade: 1.0

Projects

01/2026–	**PhD Project**, *Learning Theory for Diffusion Models*, Statistical analysis of diffusion models and applications to image and text generation.
01/2025–	**PhD Project**, *Bayesian Operator Learning*, Development of a Bayesian operator learning framework with Python implementation for learning parameter-dependent PDEs.
01/2024–12/2024	**PhD Project**, *Statistical Learning Theory for Operator Learning*, Theoretical analysis of sample complexity for neural operator architectures.
12/2022–10/2023	**Master's Thesis**, *Open-loop stable solutions of a two-legged robot around the standing position*, Solution of multi-phase optimal control problems and stability optimization for a robot model.
02/2022–06/2023	**Master's Thesis**, *Implementation of Modified Gravity Theories with Screening Effects into KFT*, Development and implementation of numerical methods in Python/C++ to evaluate power spectra of modified gravity theories with screening effects.

Teaching and Mentorship

2024–	**Head Tutor**, *Teaching assistant for master's-level courses "Theory of Deep Learning" (WS 2024/25) and "High-Dimensional Numerics" (WS 2025/26).*
2024–	**Student Mentoring**, *Supervision of several Bachelor's and Master's theses.*

Publications and Preprints

06/2025	**Kinetic field theory: effects of modified gravity theories with screening mechanisms on non-linear cosmic density fluctuations**, *JCAP*.
12/2024	**Statistical learning theory for neural operators**, *Accepted by JMLR, awaiting publication.*

Niklas Reinhardt
Heidelberg, 16. Januar 2026