

RESUME Klaus Mattis

Contact Information

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Research Interests

Motivic Homotopy Theory
Higher Categories
Algebraic K-Theory

Education

- 2023- PhD Student, Mathematics at JGU Mainz. Advisor: Tom Bachmann
- 2022 MSc Mathematics, Grade: 1.0, Thesis title: *Isomotives of Dimension at most 1*, Advisor: Fabien Morel
- 2021 BSc Mathematics, Thesis title: *Examples of étale (φ, Γ) -modules*, Advisor: Werner Bley
- 2017-2022 Study of Mathematics at LMU Munich
- 2017 Abitur at Gymnasium Oberhaching

Preprints

- Klaus Mattis and Timo Weiß. The derived ∞ -category of Cartier Modules. *preprint*, arXiv:2410.1710, 2024
- Klaus Mattis. Unstable arithmetic fracture squares in ∞ -topoi. *preprint*, arXiv:2404.18618, 2024
- Klaus Mattis. The pro-Nisnevich topology. *preprint*, arXiv:2404.17314, 2024
- Klaus Mattis. Unstable p -completion in motivic homotopy theory. *preprint*, arXiv:2401.17848, 2024

Talks

- February 2024 *Unstable p -completion in motivic homotopy theory*, YoungHom Seminar, online
- June 2024 *Proof of the Hopkins-Morel-Hoyois theorem*, International Workshop on Algebraic Topology, Shanghai

Academic Service

March 2024 *Winter school on unstable motivic homotopy theory*, JGU Mainz. Co-organizer

Teaching Experience

WT 24/25 TA, Math for Computer Science 1, JGU Mainz
WT 24/25 Organizer, PhD-Seminar, JGU Mainz
ST 24 Organizer, PhD-Seminar, JGU Mainz
ST 24 Lecturer for $\frac{1}{3}$ of the course, Algebraic Topology I, JGU Mainz
WT 23/24 TA, Math for Computer Science 2b, JGU Mainz
WT 23/24 Organizer, PhD-Seminar, JGU Mainz
ST 23 TA, Elementary Differential Geometry, JGU Mainz
ST 21 Tutor, Commutative Algebra, LMU Munich
WT 20/21 Tutor, Algebra, LMU Munich
ST 20 Organizer, Reading Class on Category Theory, LMU Munich
ST 20 Tutor, Linear Algebra 2, LMU Munich
WT 19/20 Tutor, Linear Algebra 1, LMU Munich

Non-academic Service

2016-present Volunteer at Red Cross, KV München
2016-2023 Software developer at Microstep AG
2019-2020 Volunteer author for Serlo Hochschulmathematik, an open source platform with the goal to support struggling students