

# Liam Rogel

## Employment

- 04/2025 – 09/2026 **Postdoctoral Researcher**, *University of Kaiserslautern–Landau*.
- 04/2021 – 03/2025 **Doctoral Researcher**, *University of Kaiserslautern–Landau*, until 31.12.2022 *Technical University of Kaiserslautern*, Project A20: ‘Towards unipotent character sheaves associated to Coxeter groups’ of the SFB-TRR 195.
- 10/2016 – 03/2025 **Student Research Assistant**, *University of Kaiserslautern–Landau*.

## Education

- 04/2021 – 11/2025 **PhD student in Mathematics**, *University of Kaiserslautern–Landau*, ‘Asymptotic Hecke Categories’ supervised by Ulrich Thiel.
- 08/2018 – 03/2021 **Master of Science (M.Sc.)**, *University of Kaiserslautern–Landau*, Specialization in *Algebraic Geometry and Computer Algebra*, Thesis ‘Monoidal Categories of Equivariant Coherent Sheaves on Finite Sets’ supervised by Ulrich Thiel.
- 10/2015 – 07/2018 **Bachelor of Science (B.Sc.)**, *University of Kaiserslautern–Landau*, Subsidiary subject *Computer Science* and mathematical specialization in *Algebra, Geometry and Computational Algebra*, Thesis ‘Patchworking of Real Algebraic Plane Curves’ supervised by Andreas Gathmann.

## Research stays

- 06/2022 – 08/2022 Department of Mathematics, University of Oregon, Eugene, OR, US, visiting Associate Professor **Ben Elias**

## Publications

### Accepted

- 2026 with Ulrich Thiel. **The center of the asymptotic Hecke category and unipotent character sheaves**. *Representation Theory*, accepted.

### PhD Thesis

- 2026 **Asymptotic Hecke Categories**. Rheinland-Pfälzische Technische Universität Kaiserslautern-Landau. DOI: 10.26204/KLUEDO/9643

## Preprint

07/2025 with Ben Elias and Daniel Tubbenhauer. **Idempotents, traces, and dimensions in Hecke categories**, *arxiv:2507.10061*

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## Conferences, Talks

### Organizer

09/2023 **Joint Block Seminar on Category Theory**, *Trippstadt, Germany*, Role: Joint main organizer and speaker

### Talks (Slides available on request)

06/2026 **International Workshop on quantum groups, categorification and related topics**, *Tianyuan Mathematical Research Center, Kunming, Yunnan, China*, **The Zamolodchikov relation**

01/2026 **Categorification UEA 2026**, *University of East Anglia, Great Britain*, **Idempotents and dimensions in the asymptotic Hecke category**

09/2025 **SFB TRR 195 Annual Meeting 2025**, *Tübingen, Germany*, **Computing in the asymptotic Hecke category**

02/2023 **IRTG Seminar Block Meeting 2023**, *Bad Münster am Stein, Germany*, **Categorifications of two-sided Kazhdan Lusztig cells using Soergel diagrammatics**

### Seminars

03/2026 **Seminar in Representation Theory (online)**, *Institute of Mathematics, Academia Sinica, Taiwan*, **Computing in the asymptotic category**

12/2025 **UZH Seminar**, *Zurich, Switzerland*, **Computing Idempotents and Dimensions in the Asymptotic Hecke Category**

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## References

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