Maximilian **Kaipel**

Universität zu Köln Email

RESEARCH INTERESTS

Representation theory of finite-dimensional algebras, τ-tilting theory, stability conditions

EDUCATION

PhD in Mathematics	July 2022 - present
University of Cologne, Germany	
Supervisor: Prof. Dr. Sibylle Schroll	
MMath in Mathematics	Sep 2017 - June 2021
University of Edinburgh, Scotland	
First Class Honours	

VOLUNTEER WORK

Volunteer intern	Jan 2022 - June 2022
Grenzenlos - Intercultural Exchange, Vienna, Austria	
Volunteer teaching assistant	Sep 2021 - Dec 2021
Livingstone Christian Academy, Cebu, Philippines	

PUBLICATIONS AND PREPRINTS

PREPRINTS

The category of a partitioned fan	2023
	arXiv:2311.05444

CONFERENCE PROCEEDINGS

Wall-and-chamber structures for finite-dimensional algebras and τ-tilting theory, lecture notes joint with Hipolito Treffinger	2023
to be published in the conference proceedings of ICRA 2022	arXiv:2302.12699

SEMINAR AND CONFERENCE TALKS

SEMINAR TALKS

The category of a partitioned fan	December 2023
Seminar on Homological Algebra and Related Topics - *online, Buenos Aires, Argentina*	
On a category associated to a partitioned fan	June 2023
Algebra Group Seminar - *Cologne, Germany*	
A symmetric algebra with asymmetric wall-and-chamber structure	May 2023
Lancaster PG forum - *online, Lancaster, U.K.*	
The fan of g-vector cones of τ-rigid pairs	Dec 2022
Algebra Group Seminar - *Cologne, Germany*	

An introduction to point modules Aug 2021
MAA MathFest 2021 - *online, USA*

POSTER PRESENTATIONS

The category of a partitioned fan Sep 2023
τ-research school - *Cologne, Germany*

AWARDS AND FUNDING

AWARDS

William & Isabella Dick Prize - £300 July 2021
for the best dissertation from a 5th year student

Simon Gray Prize - £100 July 2018
for the best highest grade in "Logic 1"

2nd place Dr. Hans Riegel-Fachpreis in Physics - €400 July 2017
for a project on air quality in classrooms as part of the Austrian Matura

CONFERENCE PARTICIPATION

Conference: "Combinatorial aspects of representation theory" March 2023
Accommodation funded *Oslo, Norway*

Research school: "Categories, clusters and completions master class" March 2023
Accommodation funded *Aarhus, Denmark*

Conference: "Quivers, Clusters, Moduli and Stability" Jan 2023
Accommodation and travel funded *Oxford, U.K.*

Conference: "ICRA 2022" Aug 2022
Accommodation in Montevideo funded *Montevideo, Uruguay*

ORGANISATION

τ-research school Sep 2023
Co-organised with K. Baur, S. Schroll and S. Barmeier *Cologne, Germany*

SFB Summer Retreat Aug 2023
Part of local organising committee *Cologne, Germany*

Algebras and Representation Theory in Germany #1 Jan 2023
Co-organised with H. Krause, S. Schroll and C. Stroppel *Cologne, Germany*

LAGOON Webinar Oct 2022 - Dec 2022
Managing mailing list and YouTube channel *online*

Quivers, representation theory and physics Sep 2022
Part of the local organising committee *Cologne, Germany*

ICRA 2022 Aug 2022
Part of the local organising committee *Buenos Aires, Argentina*

Wikipedia contributions

Bergman's diamond lemma - Article created	2021
Singular cubic surfaces - Subsection added	2021
Sklyanin algebras - Article created	2021

Other

Refereeing
Peer-review written for 1 article.

Supervision
Currently co-supervising one Master's student thesis together with Sibylle Schroll.

Languages

German	Native
English	Fluent
Mandarin Chinese	Intermediate
German Sign Language (DGS)	Basic
Spanish	Beginner