

Benedikt Pago (University of Cambridge)
Symmetric algebraic circuits and homomorphism counting

Eva Fluck (RWTH Aachen)
Monotonicity of cops-and-robber-games

11:45 - 12:05 Break

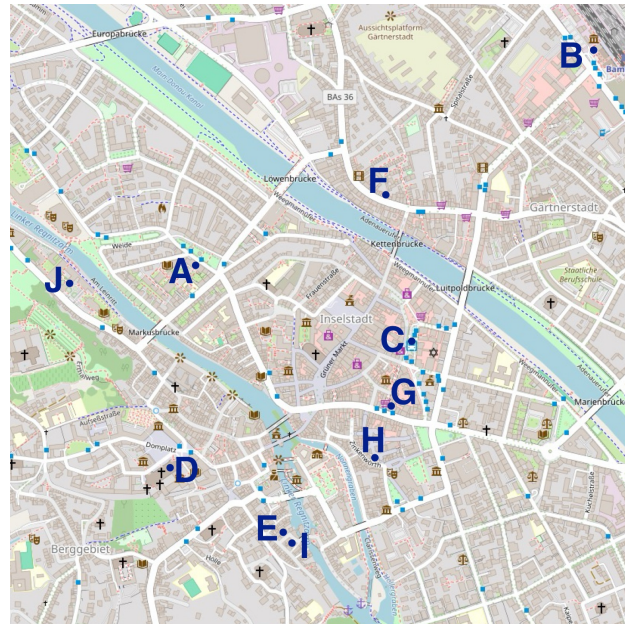
12:05 - 12:55 **Session 6: Semantics**

Marius Tritschler (TU Darmstadt)
Team logics with function atoms

Sophie Brinke (RWTH Aachen)
Compactness in Semiring Semantics

12:55 - 13:00 Farewell

Optional Social Event: Stay for lunch, then attend the guided tour to the famous *Bamberg Cathedral* at 14:15. End: approx. 15:15. Advice on options for lunch will be given.



Map source: © OpenStreetMap contributors

- A: Marcusshaus
- B: Main Railway Station
- C: Central Bus Station (ZOB)
- D: Bamberg Cathedral
- E: Klosterbräu
- F: Hotel Europa
- G: Hotel Ibis Styles
- H: Hotel Ibis Altstadt
- I: Hotel Molitor
- J: Welcome Hotel

AlMoTh 2025

February 27 - 28, 2025



University of Bamberg



Welcome

AlMoTh 2025 takes place at Otto-Friedrich-Universität Bamberg, 27th and 28th of February, 2025.

The meeting is held in room M3N/02.32 of the *Marcushaus* building, Markusplatz 3.

Getting Here

By foot: From the station Marcushaus is an approximately 20 minute walk.

By bus: From the station bus stop, take any bus to the *ZOB*. From there any bus on the routes 904, 906, 910 or 915 will take you to the *Markusplatz* bus stop, which is across the street from Marcushaus. The 906 departs every 15 minutes from bay G.

Timetables can be found in *VGN* mobile app.

AlMoTh Dinner and Social Event

We will have dinner at 19:30 on the 27th at the *Klosterbräu* Gaststätte, Obere Mühlbrücke 1-3 (close to the bus line 910 in the direction of Michelsberg, the bus stop Domplatz, and a 15 minute walk from the conference location).

A guided tour to the famous Bamberg Cathedral, 14:15 - approx. 15:15, on Friday 28.2.2025.

Internet

Internet is accessible via *eduroam* on the campus or *@BayernWLAN* throughout the city.

Contact

Website:

<https://www.uni-bamberg.de/algok/research/almoth2025>

Email:

almoth2025.algok@uni-bamberg.de

Programme

Thursday, February 27

12:30 - 13:15 Arrival and snack

13:15 - 13:25 Welcome

13:25 - 14:40 **Session 1: Homomorphisms and model checking**

Harry Vinall-Smeeth (TU Ilmenau)

When does a set of homomorphisms not admit a small representation?

Louis Härtel (RWTH Aachen)

Approximations of Homomorphism Reconstructibility

Florian Bruse (TU Munich)

Space-Efficient Model-Checking of Higher-Order Recursion Schemes

14:40 - 15:10 Break

15:10 - 16:25 **Session 2: Logic, tame graph classes and succinctness**

Steffen van Bergerem (HU Berlin)

On the VC Dimension of First-Order Logic with Counting and Weight Aggregation

Nikolas Mühlmann (University of Bremen)

Forbidden Induced Subgraphs for Bounded Shrub-Depth and the Expressive Power of MSO

Sebastian Pfau (TU Ilmenau)

A formula size game for modal logic

16:25 - 16:45 Break

16:45 - 17:35 **Session 3: Colour refinement and finite variable logics**

Benjamin Scheidt (HU Berlin)

Color Refinement for Relational Structures

Georg Schindling (TU Darmstadt)

Aspects of Requantification in Finite Variable Logics

19:30 Dinner at Klosterbräu

Friday, February 28

09:00 - 10:15 **Session 4: Languages and queries**

Wim Martens (University of Bayreuth)

Programming in the Large with Data

Owen Bell (Loughborough University, UK)

FC-Datalog as a Framework for Efficient String Querying

Sam M. Thompson (Loughborough University, UK)

Characterization and Decidability of FC-Definable Regular Languages

10:15 - 10:30 Break

10:30 - 11:45 **Session 5: Queries, circuits and games**

Sarah Kleest-Meißner (Hasselt University)

Puzzling over Subsequence-Query Extensions - A Medley