

# Final Program

## DARSTELLUNGSTHEORIETAGE AND NIKOLAUS CONFERENCE 2021

(Lehrstuhl für Algebra und Zahlentheorie, RWTH Aachen)

The talks on Thursday and Friday morning were in Room RS 4 in ground floor of Rochusstrasse 2-14.

The talks on Friday afternoon and Saturday were in Room IV in first floor of Hauptgebäude, Templergraben 55.

Meeting point and coffee breaks were at Lehrstuhl für Algebra und Zahlentheorie in first floor of Pontdriesch 14/16, and also the larger room SeMath (008) in the ground floor.

Attendees had to fulfill the 2G+ conditions (proof of Covid vaccination or recovery and each day a current negative Corona test).

### Thursday, December 9, 2021

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|-------------|---|
| 2.01–2.31pm | <b>Benjamin Sambale</b> (Hannover): <i>Lower Bounds on the Number of Brauer Characters</i>                                    |
| 2.40–3.00pm | <b>Britta Späth</b> (Wuppertal): <i>Equivariant Jordan Decomposition</i><br>(coffee and discussion)                           |
| 4.02–4.31pm | <b>Kevin Wolf</b> (Marburg): <i>Representations of Deformed Nichols Algebras</i>  |
| 4.40–5.06pm | <b>Jean Michel</b> (Paris): <i>Tower Equivalence and Lusztig's Fourier Transform</i>  |
| 5.20–6.00pm | <b>Gunter Malle</b> (Kaiserslautern): <i>Yokonuma Type Algebras for Torus Normalisers in <math>\ell</math>-Compact Groups</i> |
| 7.00pm–??   | <b>Conference dinner</b> (in the Pontgarten, Pontstraße 154)  |

**Friday, December 10, 2021**

- 9.01–9.17am **Julian Brough** (Wuppertal): *Characters of  $d$ -Tori Normalisers in  $Sp(2n, q)$*
- 9.30–9.46am **Lucas Ruhstorfer** (Kaiserslautern): *Quasi-Isolated Blocks and the Alperin-McKay Conjecture*
- 10.00–10.51am **Birte Johansson** (Kaiserslautern): *On the Verification of the Inductive McKay-Navarro Condition*
- 11.00–11.42 **Jonathan Gruber** (Lausanne): *Singular Modules for Reductive Algebraic Groups and a Translation Principle for Tensor Products*
- (lunch break)
- 2.01–2.21pm **Àngel García Blàzquez** (Murcia): *The Isomorphism Problem for Rational Group Algebras of Metacyclic Groups*
- 2.30–2.48pm **Leo Margolis** (Madrid): *The Modular Isomorphism Problem*
- 3.00–3.19pm **Diego García Lucas** (Murcia) : *Non-Isomorphic Finite 2-Groups with Isomorphic Modular Group Algebras*
- (coffee and discussion)
- 4.40–5.00pm **Damiano Rossi** (Wuppertal): *Generalized Harish-Chandra Theory for Dade's Projective Conjecture*
- 5.10–5.26pm **Laura Voggesberger** (Kaiserslautern): *An Introduction to Nilpotent Pieces*
- 5.40–6.00pm **Ana-Maria Retegan** (Lausanne): *Eigenvalue Multiplicities of Group Elements in Irreducible Representations of Simple Linear Algebraic Groups*
- 7.00pm–?? No pre-booked location — use the nearby restaurants and pubs.

Saturday, December 11, 2021

(small delay caused by virus)

10.06–10.26am **Olivier Dudas** (Paris): *Macdonald Polynomials for Complex Reflection Groups*

10.37–10.55am **Dario Mathiä** (Kaiserslautern): *A Variant of Kostka–Macdonald Coefficients at  $q = t$  for Multipartitions via Cherednik Algebras*

11.03–11.24am **Balthazar Charles** (Paris): *Cartan Matrices of Finite Monoids and Fixed Point Counting*

11.30–11.52am **Wilf Wilson** (St Andrews): *Perfect Refiners for Permutation Group Backtracking Algorithms*

(lunch break)

2.00–2.24pm **Thomas Gobet** (Tours): *Toric Reflection Groups*

2.31–2.50pm **Johannes Schmitt** (Kaiserslautern): *On Parabolic Subgroups of Symplectic Reflection Groups*

3.00–3.16pm **Ilias Andreou** (Versailles): *Brauer Algebras of Complex Reflection Groups*

(coffee and discussion)

4.40–5.03pm **Nathan Chapelier** (Tours): *Shi Variety Corresponding to an Affine Weyl Group*

5.10–5.28pm **Sofia Brenner** (Jena): *Socles of Centers of Group Algebras*

5.40–6.00pm **Thomas Gerber** (Lausanne): *Combinatorial Howe Duality*

7.00pm–?? **Research Cambridge Style!** (in the "Labyrinth", of course)

Anyone was welcome to attend the talks.

Frank Lübeck