# Oberseminar

# Representations of finite reductive groups

SS 22

Termin: **Mo. 16:00 – 17:30 (Raum 48-438)** Beginn: 25. April 2022

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|---|---|---|
| 25.4.22 | Gunter Malle: | **Reductive linear algebraic groups** ([MT, §8,§9,§11.1]) |
| 2.5.22 | Laura Voggesberger: | **Finite groups of Lie type** ([MT, §21–24]) |
| 16.5.22 | Wolfgang Bock: | **Maximal tori, Deligne–Lusztig characters** ([MT, §25], [Ca, 7.1–7.4],[GM, 2.2]) |
| 23.5.22 | Annika Bartelt: | **Unipotent characters, degree polynomials** ([GM, 2.3]) |
| 30.5.22 | Birte Johansson: | **Geometric conjugacy and Lusztig series** ([Ca, §4],[GM, 2.5],[DM, 11.1,11.3]) |
| 13.6.22 | Lucas Ruhstorfer: | **Jordan decomposition and classification of unipotent characters** ([GM, 2.6,4.3–4.5],[DM, 11.4–11.6]) |
| 20.6.22 | Tamara Linke: | **BN-pairs, Harish-Chandra theory** ([GM, 3.1–3.2],[DM, §5]) |
| 27.6.22 | Caroline Lassueur: | **Levi subgroups, Lusztig induction** ([GM, 3.3],[DM, §9]) |
| 4.7.22 | Diego Robayo Bargans: | **Duality and the Steinberg character** ([GM, 3.4], [DM, §7]) |
| 11.7.22 | Gunter Malle: | **$d$-Harish-Chandra theory** ([GM, 3.5], [BM]) |
| 18.7.22 | Marie Roth: | **Unipotent classes and Kawanaka representations** ([Ca, §5],[Ta, App.], [DM, §12]) |

## Literatur


[BM] M. Broué, G. Malle, Generalized Harish-Chandra theory. Pp. 85–103 in: *Representations of Reductive Groups*, Cambridge University Press, Cambridge, 1998.

[Ca] R. W. Carter, *Finite Groups of Lie Type. Conjugacy Classes and Complex Characters*. Wiley Classics Library. John Wiley & Sons, Chichester, 1993.

[DM] F. Digne, J. Michel, '*Representations of Finite Groups of Lie Type*', London Mathematical Society Student Texts, **95**. Cambridge University Press, Cambridge, 2020.

[GM] M. Geck, G. Malle, *The Character Theory of Finite Groups of Lie Type: A Guided Tour*. Cambridge University Press, Cambridge, 2020.

[MT] G. Malle, D. Testerman, *Linear Algebraic Groups and Finite Groups of Lie Type*. Cambridge Studies in Advanced Mathematics, 133. Cambridge University Press, Cambridge, 2011.

[Ta] J. Taylor, *On Unipotent Supports of Reductive Groups With a Disconnected Centre*. Phd Thesis, Univ. of Aberdeen, 2012.


**Interessierte Hörer sowie weitere Vortragende sind herzlich willkommen!**