

# Oberseminar

## Blocks of Finite Reductive Groups

WS 19/20

Termin: **Mo. 15:30 – 17:00 (Raum 48 - 438)**

Beginn: 4.11.2019

4.11.19	Gunter Malle:	<b>Introduction</b>
11.11.19	Laura Voggesberger:	<b>BN-pairs</b> ([Ge, 1.6–1.7.4], [CE, §2])
18.11.19	Birte Johansson:	<b>Blocks in defining characteristic</b> ([CE, 6.4,6.3])
25.11.19	Vanishree Krishna Kirekod:	<b>Harish-Chandra theory, cuspidal pairs</b> ([GM, 3.1–3.1.18])
2.12.19	Lucas Ruhstorfer:	<b>Finite reductive groups, Hecke algebras</b> ([MT], [GM, 3.2–3.2.10, 3.2.18])
9.12.19	—	No talk (Conference in Bad-Dürkheim)
16.12.19	Emily Norton:	<b>Lusztig induction, Lusztig series</b> ([CE, 8.4], [GM, 3.3–3.3.13, §2, 3.3.17–3.3.25])
13.1.20	Niamh Farrell:	<b><math>q</math>-Schur algebras</b> ([CE, 19, 20?])
20.1.20	Gunter Malle:	<b>The theorem of Broué–Michel</b> ([CE, 9–9.12])
27.1.20	Gunter Malle:	<b>Subpairs, <math>q - 1</math>-blocks</b> ([CE, 5.1,5.3])
3.2.20	Gunter Malle:	<b><math>d</math>-Harish-Chandra theory, comparison theorem</b> ([GM, 3.5–3.5.21, 4.6.20–4.6.21])
10.2.20	Gunter Malle:	<b>Unipotent blocks, <math>\ell</math>-subgroups, defect groups</b> ([CE, 13.3, 22.2–22.4])

### LITERATUR

- [CE] M. CABANES, M. ENGUEHARD, *Representation theory of finite reductive groups*. Cambridge University Press, Cambridge, 2004.
- [Ge] M. GECK, *An introduction to algebraic geometry and algebraic groups*. Oxford University Press, Oxford, 2003.
- [GM] M. GECK, G. MALLE, *The character theory of finite groups of Lie type*. Cambridge University Press, Cambridge, 2020.
- [MT] G. MALLE, D. TESTERMAN, *Linear algebraic groups and finite groups of Lie type*. Cambridge University Press, Cambridge, 2011.

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