## Oberseminar

## KLR algebras

## SS 2015

Termin: Mo. 15:30 - 17:00 (Raum 48-438) Beginn: 20. 4. 2015

21.4.15	Gunter Malle:	Introduction and motivation
27.4.15	Pablo Luka:	Khovanov–Lauda algebras, I $([2, 2.1–2.3])$
4.5.15	Ulrike Faltings:	Khovanov–Lauda algebras, II ([2, 2.4–2.6])
11.5.15	Elisabeth Schulte:	Cyclotomic Hecke algebras and cellular algebras ([5, 1.1–1.3])
18.5.15	Simon Schmider:	Semisimple cyclotomic Hecke algebras ([5, 1.4–1.6])
1.6.15	Eugenio Giannelli:	Cyclotomic quiver Hecke algebras ([3, 2.2–2.7],[5, 2.1–2.3])
8.6.15	Caroline Lassueur:	Semisimple KLR algebras ([5, 2.4–2.5])
15.6.15	Michael Livesey:	Graded Specht modules
		([3, 5.3-5.4,6],[5, 3.1-3.2])
22.6.15	Michael Livesey:	Graded Isomorphism Theorem
29.6.15	Thomas Gobet:	Graded induction and branching rules ([3, §7],[5, 3.4])
6.7.15	Gunter Malle:	Quantum groups and dual canonical basis ([3, §8],[5, 3.5])
13.7.15	Caroline Lassueur:	Graded Ariki's categorification ([3, §9],[5, 3.5])
20.7.15	Britta Späth:	James' conjecture and graded adjustment matrices
		$([3, \S10], [5, 3.7])$

## LITERATUR

- [1] J. Brundan, Quiver Hecke algebras and categorification. Pp. 103–133 in: Advances in Representation Theory of Algebras, EMS Ser. Congr. Rep., Eur. Math. Soc., Zürich, 2013.
- [2] M. Khovanov, A. Lauda, A diagrammatic approach to categorification of quantum groups. I. Represent. Theory 13 (2009), 309–347.
- [3] A. Kleshchev, Representation theory of symmetric groups and related Hecke algebras. Bull. Amer. Math. Soc. 47 (2010), 419–481.
- [4] A. Kleshchev, Representation theory and cohomology of Khovanov–Lauda–Rouquier algebras. Pp. 109–163 in: *Modular Representation Theory of Finite and p-adic Groups*, World Scientific, 2015.
- [5] A. Mathas, Cyclotomic quiver Hecke algebras of type A. Pp. 165–266 in: Modular Representation Theory of Finite and p-adic Groups, World Scientific, 2015.

[4] and [5] are available electronically and as a book via our library.

Interessierte Hörer sowie weitere Vortragende sind herzlich willkommen!