MAT595: SEMINAR REPRESENTATION THEORY OF ALGEBRAS

What?

The philosophy is: Many interesting questions in mathematics can be studied by looking at their linearization *a.k.a.* their linear shadows. This is the main idea behind representation theory. For example, one can study algebras (which are non-linear) and their linear shadows, which is the main objective of the seminar. The seminar follows the book [Sc14].

Who?

BSC or MSC or PhD students in Mathematics interested in a mixture of linear algebra and combinatorics, but everyone is welcome.

Where and when?

▶ Time and date.
  • Every Monday from 13:00–14:45.
  • Room Y21F70, University Zurich, Institute of Mathematics.
  • First meeting: Monday 02.Mar.2020. Last meeting: Monday 18.May.2020. Preliminary meeting: Friday 14.Feb.2020.

▶ Website http://www.dtubbenhauer.com/seminar-algebras-2020.html

Preliminary Schedule.

▷ Representations of quivers I. (02.Mar.2020)

▷ Representations of quivers II. (09.Mar.2020)

▷ Projective and injective representations I. (16.Mar.2020)

▷ Projective and injective representations II. (23.Mar.2020)

▷ Projective and injective representations III. (30.Mar.2020)

▷ Auslander–Reiten quivers. (06.Apr.2020)

▷ Gabriel's theorem. (27.Apr.2020)

▷ Algebras and modules I. (04.May.2020)

▷ Algebras and modules II. (11.May.2020)

▷ Quivers with relations. (18.May.2020)
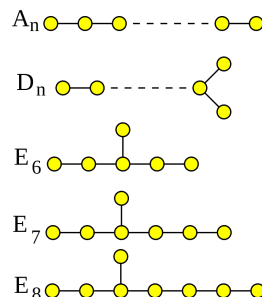
References

[Sc14]   R. Schiffler. *Quiver representations.* CMS Books in Mathematics/Ouvrages de Mathématiques de la SMC. Springer, Cham, 2014.

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