



Du
24
OCT.
2022

14h00
-
15h00

SÉMINAIRE D'ALGÈBRE

Julia Sauter: Tilting theory in exact categories

INSCRIPTION

We define tilting subcategories in arbitrary exact categories to achieve the following. Firstly: Unify existing definitions of tilting subcategories to arbitrary exact categories. Discuss standard results for tilting subcategories: Auslander correspondence, Bazzoni description of the perpendicular category. Secondly: We treat the question of induced derived equivalences separately - given a tilting subcategory T , we ask if a functor on the perpendicular category induces a derived equivalence to a (certain) functor category over T . If this is the case, we call the tilting subcategory *ideq tilting*. We prove a generalization of Miyashita's theorem (which is itself a generalization of a well-known theorem of Brenner-Butler) and characterize exact categories with enough projectives allowing *ideq tilting* subcategories. In particular, this is always fulfilled if the exact category is abelian with enough projectives.

URL of the page: <https://www.ihp.fr/fr/agenda/julia-sauter-tilting-theory-exact-categories>



INSTITUT HENRI POINCARÉ - UAR839

Sorbonne Université / CNRS
11 rue Pierre et Marie Curie
75231 Paris Cedex 05

HORAIRES

L'institut :

- lundi au vendredi de 8h30 à 18h,
- fermé les jours fériés.

Le musée - Maison Poincaré :

- lundi, mardi, jeudi et vendredi de 9h30 à 17h30,
- samedi de 10h à 18h,
- fermé le mercredi et le dimanche.