



Du
31
OCT.
2022

11h00
-
13h00

SÉMINAIRE D'ALGÈBRE

Sota Asai : TF equivalence classes and canonical decompositions for E-tame algebras

INSCRIPTION

This is joint work with Osamu Iyama. Let A be a finite dimensional algebra over an algebraically closed field. Then the numerical torsion pairs of Baumann-Kamnitzer-Tingley give an equivalence relation on the real Grothendieck group of finitely generated projective A -modules, which is called TF equivalence. By results of Yurikusa and Bruestle-Smith-Treffinger, we have that the g-vector cone of each 2-term presilting complex is a TF equivalence class. To get more TF equivalence classes, we can use canonical decompositions of elements in the (integral) Grothendieck group of finitely generated projectives introduced by Derksen-Fei. We have showed that the cone defined by the canonical decomposition of each element is contained in some single TF equivalence class. Moreover, we have also obtained that, if A is an E-tame algebra, then this cone is precisely a TF equivalence class. In this talk, I will explain these results and some important steps to prove them.



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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.