



Du
19
SEPT.
2022

14h00
-
15h00

SÉMINAIRE D'ALGÈBRE

Liran Shaul : The finitistic dimension conjecture via DG-rings

Zoom

The finitistic dimension of a ring A is defined to be the supremum of projective dimensions among all A -modules of finite projective dimension. It is an open problem whether this quantity is finite for finite dimensional algebras over a field and for artin algebras.

In this talk, I will explain a new approach for studying the finiteness of the finitistic dimension by embedding the ring A inside a nicely behaved differential graded algebra, and using relation between this DG-algebra and A to deduce results about the finitistic dimension. As an application of these methods, I will explain how to generalize a recent sufficient condition of Rickard, for $\text{FPD}(A) < \infty$ in terms of generation of $D(A)$ from finite dimensional algebras over a field to all left perfect rings which admit a dualizing complex.



INSTITUT HENRI POINCARÉ

11 rue Pierre et Marie Curie
75231 Paris Cedex 05

HORAIRES

Lundi au vendredi : 8h30 à 18h
Fermé les jours fériés