



Du  
**19**  
SEPT.  
2022

14h00  
-  
15h00

## **SÉMINAIRE D'ALGÈBRE**

**Liran Shaul : The finitistic dimension conjecture via DG-rings**

Zoom

INSCRIPTION

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.

URL de la page : [https://www.ihp.fr/fr/agenda/liran-shaul-finitistic-dimension-conjecture-dg-rings&is\\_pdf=true](https://www.ihp.fr/fr/agenda/liran-shaul-finitistic-dimension-conjecture-dg-rings&is_pdf=true)



## **INSTITUT HENRI POINCARÉ - UAR839**

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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.