

# **EQUIVARIANT PERIODIC CYCLIC HOMOLOGY**

FRANCESCO PAGLIUCA

Periodic cyclic homology is a variation of cyclic homology and it is a fundamental tool in noncommutative geometry because it plays the same role as de Rham cohomology in commutative geometry.

This theory has been widely studied and also extended in an equivariant context.

In this talk, we aim to go beyond the group case and introduce the category of modules over the convolution algebra of an ample groupoid.

Then, we will present all the objects needed to define equivariant periodic cyclic homology for algebras in this category.

Finally, we will discuss the main properties of this homology, as homotopy invariance and stability.

This is a joint work with C. Voigt.