## Seminário de Álgebra

## Endomorphisms of direct products of free and surface groups and their fixed points

**Enric Ventura** Universitat Politècnica de Catalunya

> 16/10/2020 14:30 Horas Zoom

## Abstract.

We review the main results known about fixed point subgroups of automorphisms and endomorphisms of free and surface groups, with special emphasis on the properties of inertia and compression. Then we consider direct products, G, of finitely many free and surface groups, and give a characterization of when G satisfies the condition  $rank(Fix\varphi) \leq rank(G)$  for every  $\varphi$  in Aut(G). We also study when fixed point subgroups are always compressed or always inert in such a group. This is joint work with Q. Zhang and J. Wu.