

Centro de **Matemática** Universidade do Porto



Seminar on Semigroups, Automata and Languages

Stallings foldings for free extensions.

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Abstract: We generalize to extensions by free groups $(G \rtimes F_n)$ the classical theory of Stallings describing subgroups of the free groups as automata.

This approach provides conditions for the solvability of the membership problem and provides insight on other important algorithmic problems for this family. For example, I will discuss an appealing geometric description of intersections of subgroups in $Z^m x F_n$, which denies both Howson's property, and any "Hanna Neumann-like" bound within this family.

This is a joint work with Enric Ventura.

Date: Wednesday, 21 November 2018, 14:30 Place: Room FC1 030, DMat-FCUP



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