



CENTRO DE  
**MATEMÁTICA**  
UNIVERSIDADE DO PORTO

## Seminar on Semigroups, Automata and Languages

Friday, March 3, 2025, 14:30

Online Zoom Meeting

**Gemma Crowe**

Department of Mathematics, University of Manchester

### (TWISTED) CONJUGACY LANGUAGES IN GROUPS

Conjugacy languages, first introduced by Ciobanu and Hermiller, are a useful tool in understanding the behaviour of conjugacy classes in finitely generated groups. In this talk I will survey what we know so far about two of these languages, namely the conjugacy geodesic language, and the shortlex conjugacy language. We will discuss some algebraic and geometric techniques that can be used to determine the nature of these languages in different groups.

We will finish with an introduction to twisted conjugacy languages, an adaption of conjugacy languages which, while interesting in its own right, also provides new information on conjugacy languages in group extensions. This session will be held in the following Zoom link:

<https://fc-up-pt.zoom.us/j/85665346562>



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