

## Seminar on Semigroups, Automata and Languages

Friday, February 28, 2025, 11:30

Online Zoom Meeting

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## TOPOI OF AUTOMATA

In this talk, I will explore the connection between algebraic language theory and topos theory, focusing on why algebraic language theory is appealing to topos theorists—or at least to me. I will begin by introducing toposes as a simultaneous generalization of topological spaces and monoids. Then, I will construct the topos of automata, the topos of regular languages, and the toposes of other language classes. Finally, I will discuss what topos theory might offer to automaton theory, particularly in relation to "geometric invariants" in topos theory.

This session will be held in the following Zoom link:

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





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