

# Automata and finite order elements in the Nottingham group

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The Nottingham group at 2 is the group of (formal) power series  $t + a_2t^2 + a_3t^3 + \dots$  in the variable  $t$  with coefficients  $a_i$  from the field of 2 elements. Describing its torsion elements is a difficult problem. In this talk I will argue that it is advantageous to use tools from the world of automata to study its finite order elements. This is joint work with Jakub Byszewski and Gunther Cornelissen.

## References

- J. Byszewski, G. Cornelissen, and D. Tijsma. *Automata and Finite Order Elements in the Nottingham Group*, preprint arXiv:2008.04971, 48pp., 2020.