Normalisers in Quasipolynomial Time and the Category of Permutation Groups

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May 9, 2019

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Introduction

Goal

Theorem

Let $G = \langle X \rangle \leq \operatorname{Sym}\Omega$ *be a primitive group of PA type. The normaliser* $N_{\operatorname{Sym}\Omega}(G)$ *can be computed in quasipolynomial time* $O(n^3 \cdot 2^{2\log n \log\log n} \cdot |X|)$.

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Joint work with Prof. Colva Roney-Dougal.

Recursion for Normalisers

	Intransitive
Mun See Chang	$\updownarrow$
	Transitive
	$\updownarrow$
	Primitive
Me	$\updownarrow$
	Simple

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- Functions act from the left $f(x)$ but groups from the right: $\alpha^g = g(\alpha)$.