Normalisers in Quasipolynomial Time and the Category of Permutation Groups

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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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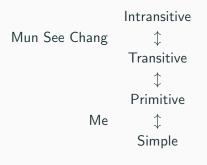
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Joint work with Prof. Colva Roney-Dougal.

Recursion for Normalisers



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