

The Reinhold Baer Prize 2024 Award Ceremony

Winner of the Reinhold Baer Prize 2024



The maximal size of a minimal generating set

Forum of Mathematics, Sigma (2023), Vol. 11:e70 1–10

He proved a conjecture of Lucchini, Moscatiello and Spiga by showing that there exist $a, b > 0$ such that any finite group G satisfies $m(G) \leq a \cdot \delta(G)^b$, for $\delta(G) = \sum_{p \text{ prime}} m(G_p)$, where G_p is a Sylow p -subgroup of G and $m(H)$ denotes the maximal size of a minimal generating set for H .

Scott Harper

University of St Andrews

@racne



Special Mention of the Reinhold Baer Prize 2024



Jan Moritz Petschick

Universität Bielefeld

Groups acting on rooted trees, the generalised Magnus property and zeta functions of groups
Heinrich-Heine-Universität Düsseldorf

This dissertation is cumulative; it consists of three parts that deal with different aspects of infinite group theory. In the first part, groups with a faithful action on a regular rooted tree are considered and a new construction inspired by the Basilica group is presented. The second part deals with the Magnus property and its connection with free polynilpotent groups. The final part studies the representation zeta function of certain subgroups of the group $SL_2^1(\mathbb{Z}_p)$.

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REINHOLD BAER PRIZE > REINHOLD BAER PRIZE 2026

The **Reinhold Baer Prize** is a biennial international prize of €1000 for a young researcher working in group theory. The prize is supported by the no profit association *AGTA - Advances in Group Theory and Applications* and by *Aracne Editrice* - it is dedicated to Reinhold Baer (1902-1979), a great German algebrist who built an important school of group theory. The selection committee of the prize consists of three members, which are nominated by the AGTA Council; the Committee selects the winner and can additionally mention a second deserving candidate. However, the Committee may decide not to award the prize, in case of absence of adequate scientific applications.

1. The 2026 edition of the prize will be awarded either to a Ph.D. thesis or to a relevant research paper, defended or published in a refereed journal during the two-year period 2024-2025.
2. If the applicant chooses to submit a research paper, no one of the authors should hold a permanent academic position.
3. The *deadline* for application is **April 30, 2026**.
4. The applicant must be under age 35 on January 1st, 2026.
5. In order to apply you must send an email to agta@unina.it attaching a copy of your ID, and either your Ph.D. thesis (together with a document attesting the date in which you defended it) or your chosen paper (together with publications details).

Unsolved Problems in Infinite Group Theory

An AGTA Prize



Questions

- Is the class of **SJ-groups** countably recognizable?

Prize: 1000€

- Is any locally graded, torsion-free \overline{T} -group abelian?

Prize: 1000€

Regulations

- The solution of the problem must be contained in a paper which is accepted for publication in a **peer-review** journal
- After the acceptance, the paper must be sent to **agta@unina.it**, and it will be subject to a **further review by AGTA's** referees and external experts
- After a positive evaluation by AGTA, the **prize** will be assigned