

Research interests

Groups acting on rooted trees, profinite groups, Hausdorff dimension, finitely generated groups, finite p -groups, Beauville groups, word problems for finite groups.

Publications up to 2021

1. With J. Uria-Albizuri: The profinite completion of multi-EGS groups, *J. Group Theory* 24 (2021), 321 – 357.
2. With M. Noce: Hausdorff dimension of the second Grigorchuk group, *Internat. J. Algebra Comput.* 31 (6) (2021), 1037 – 1047.
3. With R. Camina and A. Iniguez: Word problems for finite nilpotent groups, *Arch. Math (Basel)* 115 (2020), 599 – 609.
4. With J. Boschheidgen and B. Klopsch: Generating pairs of projective special linear groups that fail to lift, *Math. Nath.* 293 (7) (2020), 1251 – 1258.
5. With B. Klopsch: A pro- p group with infinite normal Hausdorff spectra, *Pacific J. Math.* 303 (2) (2019), 569 – 603.
6. With B. Klopsch and A. Zugadi-Reizabal: Hausdorff dimensions in p -adic analytic groups, *Israel J. Math.* 231 (2019), 1 – 23.
7. With B. Klopsch: Maximal subgroups and irreducible representations of generalised multi-edge spinal groups, *Proc. Edin. Math. Soc.* 61 (3) (2018), 673 – 703.
8. With G. A. Fernández-Alcober: A note on automorphisms of finite p -groups, *Glas. Mat. Ser. III* 51 (71) (2016), 117 – 123.
9. With T. Alexoudas and B. Klopsch: Maximal subgroups of multi-edge spinal groups, *Groups Geom. Dyn.* 10 (2) (2016), 619 – 648.
10. With C. Acciarri and P. Shumyatsky: Conciseness of coprime commutators in finite groups, *Bull. Aust. Math. Soc.* 89 (2) (2014), 252 – 258.
11. Groups of p -deficiency one, *Math. Proc. Cambridge Philos. Soc.* 156 (1) (2014), 115 – 121.
12. With R. Camina: A note on p -central groups, *Glasg. Math. J.* 55 (2) (2013), 449 – 456.
13. The automorphism group of p -central p -groups, *Int. J. Group Theory* 1 (2) (2012), 59 – 71.
14. With J. Button: Applications of p -deficiency and p -largeness, *Internat. J. Algebra Comput.* 2 (4) (2011), 547 – 574.