

Maria Tsalakou

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EDUCATION

- 2019 - present PhD Mathematics at **University of St Andrews**
Supervised by James D. Mitchell
Research on practical computation with finitely presented semigroups.
- 2017 - 2018 MSc Mathematics at **University of St Andrews**
with distinction
- 2013 - 2017 BSc Mathematics at **University of Cyprus**

PUBLICATIONS AND PREPRINTS

- [3] (with Marina Anagnostopoulou-Merkouri and James D. Mitchell) **Computing the congruences of a finite semigroup or monoid**, submitted; <https://arxiv.org/abs/2302.06295>
- [2] (with T. D. H. Coleman, J. D. Mitchell, F. L. Smith) **The Todd-Coxeter Algorithm for Semigroups and Monoids**, submitted; <https://arxiv.org/abs/2203.11148>
- [1] (with J. D. Mitchell) **An explicit algorithm for normal forms in small overlap monoids**, to appear; <https://arxiv.org/abs/2105.12125>

TALKS

- Oct 2022 **Practical computation with finitely presented monoids** - Semigroups Seminar, University of York
- Apr 2022 **The low index congruences algorithm for monoids** - Postgraduate Interdisciplinary Mathematics Symposium, University of St Andrews
- Mar 2022 **Computing congruences of finitely presented monoids** - North British Semigroups and Applications Network meeting at the University of Manchester
- Nov 2021 **Computing inverse semigroups** - Pure Postgraduate Seminar, University of St Andrews
- Oct 2021 **Presentations of inverse monoids** - Algebra and Combinatorics Seminar, University of St Andrews
- Jul 2021 **Computational methods for small overlap monoids** - North British Semigroups and Applications Network (online seminar)
- Feb 2020 **The word problem in small overlap monoids** - Pure Postgraduate Seminar, University of St Andrews

EXPERIENCE

- 2019 - present Graduate Teaching Assistant, University of St Andrews, Scotland
Tutor for small group undergraduate tutorials for Abstract Algebra, Linear Mathematics and Mathematics
- 2018 - 2019 Research Executive, Pulse Market Research, Cyprus

OTHER ACTIVITIES

- Sep 2021 - Sep 2022 Postgraduate Research Representative for the School of Mathematics and Statistics, University of St Andrews
- Jan 2021 Postgraduate Interdisciplinary Mathematics Symposium organiser, University of St Andrews
- 2019 - 2020 Mentor in Peer Mentoring scheme, University of St Andrews