# Marina Anagnostopoulou-Merkouri

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https://marinaanagno.github.io

#### **EDUCATION**

PhD in Mathematics 2023 - Present

University of Bristol

Supervisor: Prof. Tim Burness

**Master in Pure Mathematics (First Class)** 

2019 - 2023

University of St Andrews

Final year project supervisor: Prof. Colva Roney-Dougal.

## **PUBLICATIONS AND PREPRINTS**

[6] Permutation groups, partition lattices and block structures

joint with R.A. Bailey and Peter J. Cameron

50 pages, submitted.

[5] Computing finite index congruences of finitely presented semigroups and monoids

joint with Reinis Cirpons, James D. Mitchell, and Maria Tsalakou 50 pages, submitted.

so pages, susmitted.

[4] On the regularity number of a finite group and other base-related invariants

joint with Timothy C. Burness

Journal of the London Mathematical Society 110 (2024), e70035, 65 pp.

[3] Properties of congruence lattices of graph inverse semigroups

joint with Zachary Mesyan and James D. Mitchell

International Journal of Algebra and Computation 34 (2024), 371–396.

[2] Pre-primitive permutation groups

joint with Peter J. Cameron and Enoch Suleiman

**Journal of Algebra** 636 (2023), 695–715.

[1] Association schemes with given stratum dimensions: on a paper of Peter M. Neumann

joint with Peter J. Cameron

Algebraic Combinatorics 6 (2023), 1189–1210.

#### **TALKS**

[15] Manchester Algebra Seminar (University of Manchester; upcoming)	March 2025
[14] Warwick Algebra Seminar (University of Warwick; upcoming)	March 2025
[13] Bristol Combinatorics Seminar (University of Birstol)	February 2025
[12] Junior London Algebra Colloquium (Imperial College London)	October 2024
[11] Topics in Group Theory - Andrea Lucchini's birthday conference (University of Padua)	September 2024
[10] Heilbronn HDP event (University of Bristol)	September 2024

[9] Postgraduate Group Theory Conference (University of Birmingham)	July 2024		
[8] Groups in Florence IV (University of Florence)	July 2024		
[7] Bristol Junior Geometry Seminar (University of Bristol)	February 2024		
[6] Bristol Postgraduate Seminar (University of Bristol)	November 2023		
[5] Seminars on Groups and Graphs, SUSTech (Shenzhen, China; Online)	October 2023		
[4] York Semigroups seminar (University of York)	March 2023		
[3] Tomorrow's Mathematicians Today (University of Greenwich; Online)	March 2023		
[2] St Andrews Maths Society Lunchtime Lectures (University of St Andrews)	November 2022		
[1] Tomorrow's Mathematicians Today (University of Greenwich; Online)	February 2022		
ONFERENCES			

[8] Topics in Group Theory conference (University of Padua)	September 2024
[7] Heilbronn Annual Conference (University of Bristol)	September 2024
[6] Postgraduate Group Theory Conference (University of Birmingham)	July 2024
[5] Groups in Florence IV (University of Florence)	July 2024
[4] New Perspectives in Computational Group Theory (University of Warwick)	June 2024
[3] Heilbronn Annual Conference (University of Bristol)	September 2023
[2] Conference in Theoretical and Computational Algebra (Pocinho, Portugal)	July 2023
[1] Heilbronn Summer School in Probabilistic Group Theory (University of Bristol)	June 2023

## **SOFTWARE**

## Digraphs GAP package

-Efficiency improvement and implementation of algorithms for canonical labelling and graph dominators

## **Semigroups GAP package**

-Construction and implementation of new algorithms for semigroup congruences

## **TEACHING**

MyTutor

University of Bristol	September 2023 - Present
-Introduction to Pure Mathematics tutor	September 2024 - December 2024
-Linear algebra tutor	September 2023 - May 2024
-Perspectives in Mathematics demonstrator	December 2023, November 2024
Private tutoring  November 2022 - April 2023  -Prepared notes and delivered tutorials for GCSE, A-level students, and IB students.	

-Prepared notes and delivered tutorials for GCSE and A-level students.

## **Coronavirus Tutoring Initiative**

-Prepared notes and delivered tutorials for GCSE and A-level students.

April 2020 - October 2020

December 2020 - September 2022

#### FUNDING AWARDED

- St Andrews Research Internship Scheme

March 2022, September 2022

- University of St Andrews Careers Centre Employability Bursary

July 2022

- LMS Undergraduate Research Bursary

June 2022

#### LANGUAGES

Greek (Native), English (C2), French (C2), German (B2).

## **OTHER**

## **Referee for the Journal of Group Theory**

## Postgraduate Group Theory Conference 2025 organiser

August 2024 - Present

#### **Bristol Junior Algebra and Combinatorics Seminar organiser**

January 2024 - Present

-New seminar series aimed at PhD students and postdocs in algebra and combinatorics.

#### **Maths Base Helper**

*September 2020 - May 2023* 

- Helped first and second year St Andrews students with questions.

#### **School of Mathematics and Statistics Ambassador**

*October 2021 - April 2023* 

-Helped at the school of mathematics and statistics visiting day talks, attended by prospective students.

### **Zero Gravity mentor**

*July 2022 - May 2023* 

-Mentored a final year school pupil from a low-income background that wants to study mathematics in university.

## **University of St Andrews Karate Club**

- Captain (04/2021 04/2023), Covid Officer (09/2020 03/22), Wellbeing Officer (04/2020 10/2021, 04/2022
- 04/2023), Safety and Fundraising Officer (04/2020 04/2021).

## **University of St Andrews Mathematics Society**

- Social Representative.

April 2021 - March 2022