Arij Asad Curriculum Vitae

Contact School of Engineering Mathematics

Information Queen's building

University of Bristol

BS15 1RZ

UK

EMPLOYMENT University of Cambridge, Cambridge, UK

Murray Edwards College

Summer School Deputy Director July 2023 – August 2024

kn22417@bristol.ac.uk

aa2147@cantab.ac.uk

University of Cambridge, Cambridge, UK

Department of Applied Mathematics and Theoretical Physics

Cambridge Mathematics Open intern

July 2022 – August 2022

University of Bristol, Bristol, UK

Faculty of Engineering

Widening participation tutor

July 2023 –

EDUCATION University of Bristol, Bristol, UK

School of Electrical, Electronic and Mechanical Engineering

Ph.D., Mathematics November 2022 –

Advisor: Dr Andrew Lawrie

Thesis title: Hydrogen Ventilation in a Geological Disposal facility

University of Cambridge, Cambridge, UK

BA Mathematics October 2019 – June 2021

Courses mostly in applied mathematics.

Research • Fluid Dynamics

Interests • Nonlinear inverse problems

• Molecular processes in fluids

Undergraduate Lead Demonstrator Wrote and delivered weekly tutorials

TEACHING University of Bristol
EXPERIENCE Introduction to Dur

Introduction to Pure Mathematics Sept 2024 – Dec 2024 Course 6 Probability and Statistics Jan 2025 –

Supervisor

Various colleges<sup>1</sup> at University of Cambridge

II Fluid Dyamics Michaelmas 2024 - Easter 2025

Teaching Assistant

University of Bristol

Course 1 Continuum mechanics January 2024 – May 2024

<sup>&</sup>lt;sup>1</sup>Emmanuel, Queen's, Sidney Sussex, Murray Edwards, Magdalene, and Jesus.

	Course 2 Applied Linear Algebra	March 2024 – April 2024		
	Course 3 Engineering Mathematics	Sept 2024 – Dec 2024		
	Course 4 Introduction to Pure Mathematics	Sept 2024 – Dec 2024		
	Course 5 Modelling in Applied mathematics	Sept 2024 – Dec 2024		
	Private Tutor			
	A Level Mathematics (online and in-person)	October 2019 –		
	A Level Further Mathematics (online and in-person)	October 2019 –		
	A Level Mathematics Physics(online)	October 2019 –		
	A Level Mathematics Computer science (online)	October 2019 –		
	STEP Mathematics (online)	October 2020 –		
	MAT (online)	October 2020 –		
	TMUA (online)	October 2020 –		
Outreach & Enrichment	Summer School Deputy Director Contributed to teaching materials, delivered classes, and supervisions, ran evening activities			
	Murray Edwards College, Cambridge			
	She Talks Science STEP summer school, for Y1	2 2023-		
	Summer School Staff Delivered classes, and supervisions, ran evening activities			
	Murray Edwards College, Cambridge			
	Murray Edwards STEP summer school, for Y12	2019 - 2022		
	University of Cambridge			
	Sutton Trust Summer School	2021 - 2022		
	Intro to Maths at Uni	July 2021		
	University of Bristol, Bristol			
	Sutton Trust Summer School	July 2024		
	Insight Into Bristol Summer School	July 2024		
Admissions, Examining,	Maths Undergraduate Admissions Interviewer writing questions, interviewing, assessing applicants.			
Olympiads	Homerton College, Cambridge	2024		
<b>Vetter</b> Assessing content, scope, difficulty, and clarity of wording sions of papers and providing feedback.				
	UK Mathematical Olympiad for Girls	2019		
	TMUA	2024		
	ESAT	2024		
	Marker implementing and feeding back on mark scho	eme.		
	University of Bristol			
	Applied linear algebra coursework	2024		
	Engineering mathematics	2024		
	Introduction to Pure Mathematics	2024		
	Cambridge Assessment			
	Sixth Term Examination Papers (STEP) III	2023		
	United Kingdom Mathematics Trust	0010		
	UK Mathematical Olympiad for Girls	2019		

## Talks and Presentations

#### Research Talks

• RSO annual conference	2023
• RSO advanced manufacturing webinar	2023
• RSO annual conference	2024
• CMP presentation day	2022
• Murray Edwards College Maths Circle	2019

### **Outreach Talks**

•	Insight Into Bristol for y12	2024
•	Sutton Trust Summer School for y12	2024

#### SERVICE

#### Panellist

•	Mathematics Open Day, University of Cambridge	2022
•	Sutton Trust Experience Cambridge Day	2020-22

# Additional Skills

- Experience using MATLAB, Python, C and LaTeX;
- Language skills in Urdu: reading proficiency and conversation;
- Experience using a variety of virtual platforms for teaching, including Zoom, Microsoft Teams, Voov, Moodle, and Blackboard.

Dr Andrew Lawrie Senior Lecturer School of Engineering Mathematics University of Bristol andrew.lawrie@bristol.ac.uk

Dr Eve Vidalis Teaching fellow Pennsylvania State University evepound@gmail.com

#### Referees

Dr Stuart Thomson Lecturer School of Engineering Mathematics University of Bristol hk439@cam.ac.uk