Ayesha Hussain

School of Mathematics - University of Bristol - Bristol, UK, BS8 1TH

☑ ayesha.hussain@bristol.ac.uk

3rd year PhD student interested in Analytic Number Theory, with particular focus on random multiplicative functions.

Education

University of Bristol

PhD Student 2018–Present

Advised by Dr Jonathan Bober.

University of Durham (Grey College)

Integrated Masters Student, 1st Class

2013-2017

Final year project titled *The Rankin-Selberg Bound: Bounding the Fourier Coefficients of Cusp Forms Using the Rankin-Selberg Method.*

Advised by Dr Jens Funke and Dr Thanasis Bouganis.

Teaching Experience

University of Bristol

Undergraduate Tutor

Autumn 2018 - Present

- o Perspectives in Mathematics (Autumn 2020)
- First year Mathematics 1A20 module tutor (Autumn 2020)
- Analysis B module tutor (Spring 2020),
- o Number Theory module homework marker (Spring 2020),
- o First year Mathematics 1A20 module tutor (Autumn 2019),
- o Engineering Mathematics Teaching Assistant (Autumn 2019),
- o Numerical Analysis Teaching Assistant (Spring 2019),
- o First year Mathematics 1A20 module tutor (Autumn 2018).

University of Durham

Homework Marker

Autumn 2016 - Spring 2017

Second year Numerical Analysis module homework marker.

Private Tutor

2011 – Present

One-on-one Mathematics tutor.

o Preparing pupils for 11+, 13+, GCSE, A Level and University Admission examinations.

Seminar Talks

University of Bristol

Postgraduate Seminar Introduction to Random Multiplicative Functions November 2020

University of Bristol Linfoot Seminar March 2020 Distributions of Character Sums University of Bristol Postgraduate Seminar November 2019 Paths of Dirichlet Characters **Conference Talks Virtual Conference** 3rd BYMAT Conference December 2020 Distributions of Character Sums **University of Warwick** November 2019 Young Researchers in Algebraic and Analytic Number Theory Paths of Dirichlet Characters Conferences **Virtual Conference** 3rd BYMAT Conference December 2020 **Virtual Conference** Black Heroes of Mathematics Conference October 2020 University of Bristol Heilbronn Annual Conference 2020 September 2020 **University of Warwick** Young Researchers in Algebraic Number Theory November 2019 University of Oxford Warwick-Oxbridge-Manchester-Bristol-London (WOMBL) September 2019 University of Bristol Heilbronn Annual Conference 2019 September 2019 Grand Hotel San Michele, Cetraro, Italy July 2019 Symposium on Analytic Number Theory University of Bristol CMI-HIMR Summer School in Computational Number Theory June 2019 University of Mississippi NSF-CBMS Conference: L-Functions and Multiplicative Number Theory May 2019 University of Cambridge Warwick-Oxbridge-Manchester-Bristol-London (WOMBL) January 2019 University of Sheffield November 2018 Young Researchers in Algebraic Number Theory Outreach

University of Bristol

Conference co-organiser for the 2 day event.

Women and Non-Binary People in Maths: Opportunities for the future

November 2020

University of Bristol

Women in Mathematics Research

June 2020

Main conference organiser promoting studying Maths to A level students.

University of Bristol

Women and Non-Binary People in Maths: Opportunities for the future November 2019

Conference co-organiser for the 2 day event.

University of Bristol

Women in Mathematics Research September 2019

Gave a workshop on aspects of my research.

Cheltenham Science Festival

Discover Zone Mathematics Stand June 2019

Helped showcase interactive Mathematics exhibits for the general public.

Walthamstow Hall Senior School

Mathematics at Undergraduate Level and Beyond November 2018

Gave talks to years 10-12 about Mathematics at University.

Francis Holland School

Mathematics: Applications after School November 2018

Gave talks to years 10-12 about Mathematics at University.

Miscellaneous

Programming Experience: Experience using Latex, Python, HTML, CSS, Java.

Conference Co-organiser: MINGLE 2019 (annual Bristol postgraduate conference).

Conference Co-organiser: Young Researchers in Mathematics 2021, Young Researchers in Algebraic

and Analytic Number Theory 2021.

Conference Organiser: 'Women in Mathematics Research Workshop' 2020 with AMSP.

References

Dr Jonathan Bober jwbober@gmail.com

University of Bristol PhD supervisor.

Dr Jens Funke jens.funke@durham.ac.uk

University of Durham Final year project supervisor.

Dr Thanasis Bouganis athanasios.bouganis@durham.ac.uk

University of Durham

Final year project supervisor.