

Jared White

31 Warham Road, London, N4 1AR, United Kingdom

Email address: jared.white@open.ac.uk

Mobile: 07704154121

Research Interests

Group theory, Functional analysis, abstract harmonic analysis, Banach and operator algebras associated with groups and semigroups, operator theory.

Academic Publications and Preprints

- [1] J. T. White, On algebras associated with invariant means on the subnormal subgroups of an amenable group, (18 pages), arXiv:2008.09069.
- [2] N. J. Laustsen and J. T. White, Subspaces that can and cannot be the kernel of a bounded operator of a Banach space, *Proceedings of the 23rd International Conference on Banach Algebras and Applications*, De Gruyter Proceedings in Mathematics (De Gruyter 2020), 189-196.
- [3] J.T. White, Left ideals of Banach algebras and Dual Banach algebras, *Proceedings of the 23rd International Conference on Banach Algebras and Applications*, De Gruyter Proceedings in Mathematics (De Gruyter 2020), 227-253.
- [4] J.T.White, The Radical of the Bidual of a Beurling Algebra, *Quarterly Journal of Mathematics*, **69** (2018), 975-993.
- [5] N.J.Laustsen and J.T.White, An infinite C^* -algebra, with a dense, stably-finite $*$ -subalgebra, *Proceedings of the American Mathematical Society*, **146** (2018), 2523-2528.
- [6] J.T. White, Finitely-generated left ideals in Banach algebras on groups and semigroups, *Studia Mathematica*, **239** (2017), 67-99.

Employment

Associate Lecturer at the Open University (Sept 2020 – present)

Deliver online tutorials, hold office hours, correspond with students and address their queries, mark homework. Modules taught: Further Pure Mathematics, Calculus of Variations and Advanced Calculus.

Lecturer in Pure Mathematics at the University of Lancaster (Dec 2020 – April 2021)

Lecture a master's course called Operator Theory, supervise second year undergraduate projects.

Undergraduate Tutor at Peterhouse Cambridge (Oct 2020 – June 2021)

Deliver small group tutorials (supervisions) and mark homework for courses called Vectors and Matrices, and Linear Algebra.

Teaching Assistant at King's College London (Oct 2019 – April 2019)

Delivered complementary lectures for second year Real Analysis and second/third year Metric Spaces and Topology, marked homework, and held office hours.

Demonstrator at University College London (Oct 2019 – April 2019)

Ran workshops for the second year course Mathematical Methods III, marked homework, and ran Python labs for first years taking Mathematical Methods I.

Postdoctoral Researcher at le Laboratoire de Mathématiques de Besançon (Sept 2018 – Sept 2019)

Conducted original high-quality research in pure mathematics and published in peer-reviewed journals.

Graduate Teaching Assistant at the University of Lancaster (2014 – 2018)

Ran undergraduate workshops for a many second, third, and fourth year modules in algebra, analysis, and number theory. Examiner for second year Complex Analysis in 2018. Academic advisor for Hilbert Space

exam in 2015 and 2017. Gave revision lectures for Hilbert Space and Complex Analysis. Participated in out-reach events and open days.

Modules taught: Real Analysis; Linear Algebra; Groups and Rings; Number Theory; Groups and Symmetry; Rings, Fields, and Polynomials; Hilbert Space; Problem Solving.

Education

2014 – 2018: PhD at the University of Lancaster under the supervision of Professor Garth Dales and Doctor Niels Laustsen. Funded by the EPSRC.

Thesis title: *Banach Algebras on Groups and Semigroups*.

Date of defence: 20th April 2018.

2010 – 2014: BA/MMath in Mathematics, University of Cambridge. Graduated in the top half of distinctions.

Prizes

- GTA (Graduate Teaching Assistant) Teaching Award, Department of Mathematics and Statistics, University of Lancaster, 2018.
- Dean's Award for PhD Excellence, First Year Category 2015: an award presented annually by the Faculty of Science and Technology at the University of Lancaster to a PhD student who has recently completed the first year, accompanied by a £1000 prize.

Other Activities

- Founder and organizer of an online research seminar entitled Groups, Operators, and Banach Algebras (April 2020 – present).
- Invited speaker at LMS Prospects in Mathematics 2019, a two-day event for university maths students who are considering doing a PhD.
- Invited speaker at the analysis seminar at the University of Glasgow in 2018, and the semigroups seminar at the University of York in 2017.
- Spoke at numerous national and international conferences, including Banach Algebras and Applications (2015 Fields Institute, 2017 Oulu, 2019 University of Manitoba), Abstract Harmonic Analysis (2015 Dalhousie University, 2018 National Sun Yat-Sen University), Groups and Operators (2016 Chalmers University), Young Functional Analysts Workshop (2016 Queens University Belfast, 2017 Glasgow, 2018 Newcastle).

Skills

Coding

Able to program in Python and MATLAB, with some experience of C++.

Languages

Native speaker of English. Fluent in French. Good knowledge of Russian. Some rudimentary knowledge of Japanese, Mandarin Chinese, and German.

Summary of Current Research Interests

In recent research I have been investigating the ideal structure of dual Banach algebras. This family of Banach algebras includes the Measure algebra and Fourier-Stieltjes algebra of a locally compact group, as well as the algebra of bounded operators on a reflexive Banach space. In a separate project I have been looking at the algebraic structure of the invariant means of an amenable group and related objects. These topics relate particularly to Special Sessions 2 and 16