

Alistair J. Chopping

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Durham University
Department of Mathematical Sciences
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I am currently a PhD student under the supervision of Dr Charlotte Sleight, in the Department of Mathematical Sciences at Durham University. My research interests lie in the interplay between holography and the cosmological bootstrap, as well as in the conformal bootstrap programme.

Employment

- **Graduate Teaching Assistant.** *October 2022 - Present*
Department of Mathematical Sciences, Durham University, UK.

Education

- **PhD Mathematical Sciences - Theoretical Physics.** *October 2021 - Present*
Department of Mathematical Sciences, Durham University, UK.

Supervisor: *Dr Charlotte Sleight.*

Project: *Bootstrapping Holography.*

- **MPhys (Hons) Theoretical Physics.** *September 2017 - June 2021*
Department of Physics, Swansea University, UK.

Grade: 1st Class Honours, 89% Average.

MPhys Thesis: *Black Holes and The Information Loss Paradox.*

Supervisors: *Professor Timothy Hollowood & Professor S. Prem Kumar.*

Grades include:

100% in Quantum Mechanics II, Mathematical Methods I and Physics Simulation,

99% in Statistical Physics and Foundations of Astrophysics,

94% in Advanced Particle Physics,

92% in General Relativity,

89% in Quantum Field Theory.

Academic Experience

Honours & Awards

- STFC PhD Studentship *September 2021 - March 2025*
Durham University, UK.
- PM Davidson Prize *2021*
Swansea University, UK.
A departmental prize for master's-level research in theoretical physics.

Conference & Seminar Organisation

- Early Career Researchers in Mathematics (ECRM), *July 2023*
Durham University, UK.
Co-organiser. A conference designed to bring together graduate students in Mathematics from across the UK, and across a wide variety of disciplines.
– Funding sources include the *Heilbronn Institute for Mathematical Research*, the *London Mathematical Society* and the *MAGIC Consortium*.
- Theoretical Physics Student Seminar Series, *September 2022 - June 2023*
Durham University, UK.
Co-organiser. A seminar series with participants from the particle theory groups in both the mathematics and physics departments at Durham, in an effort to foster a stronger connection between the two.

Attended Conferences, Workshops & Schools

- Lezioni Avanzate di Campi E Stringhe (LACES), *November/December 2022*
Galileo Galilei Institute for Theoretical Physics, Italy.
- Paths to Quantum Field Theory, *August 2022*
Durham University, UK.
- North British Mathematical Physics Seminar, *June 2022*
University of York, UK.
- Higgs Centre School of Theoretical Physics, *May/June 2022*
University of Edinburgh, UK.

Internal Talks

- Student Seminar, *March 2023*
Durham University, UK.
- Journal Club, *February 2023*
Durham University, UK.

Teaching Experience

Teaching Assistant

- Tutor for Single Mathematics A, *Michaelmas & Epiphany terms 2022/23*
Durham University, UK.
Undergraduate module covering elementary calculus, complex numbers and linear algebra.

Outreach

- 1 hour workshop with Key Stage 5 students on university applications & academia, *July 2023*
Hanley Castle High School & Sixth Form Centre, Worcestershire, UK.

Additional Information

Computing Skills

- Programs & Programming - Good knowledge of \LaTeX , *Mathematica* & *Microsoft Office*. Previous experience with *Python* from several undergraduate courses.
- Operating Systems - Good knowledge of *Microsoft Windows*.

Foreign Language Skills

- Italian - Elementary proficiency.

Referees

- **Dr Charlotte Sleight**, Department of Mathematical Sciences and Computer Science, Durham University, UK.
E-mail: charlotte.sleight@durham.ac.uk.
- **Dr Ben Hoare**, Department of Mathematical Sciences and Computer Science, Durham University, UK.
E-mail: ben.hoare@durham.ac.uk.