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Postgraduate Virtual Open Days

PhD Programmes in
the School of
Mathematics



Helen De Montes and Moritz Linkmann

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PhDs at the University of Edinburgh

- Maxwell Institute Graduate School (MIGS)
- Programmes
- Application process
- Funding opportunities
- Structure and training requirements
- Life in Edinburgh
- Student presentations



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Maxwell Institute Graduate School (MIGS)

- Within UoE Maths – c. 110 members of academic staff and c. 40 post-docs
- Graduate School has c. 200 PhD students
- MIGS is collaboration with Heriot-Watt University which started in 2018
- First year students from both institutions are based at Bayes Centre

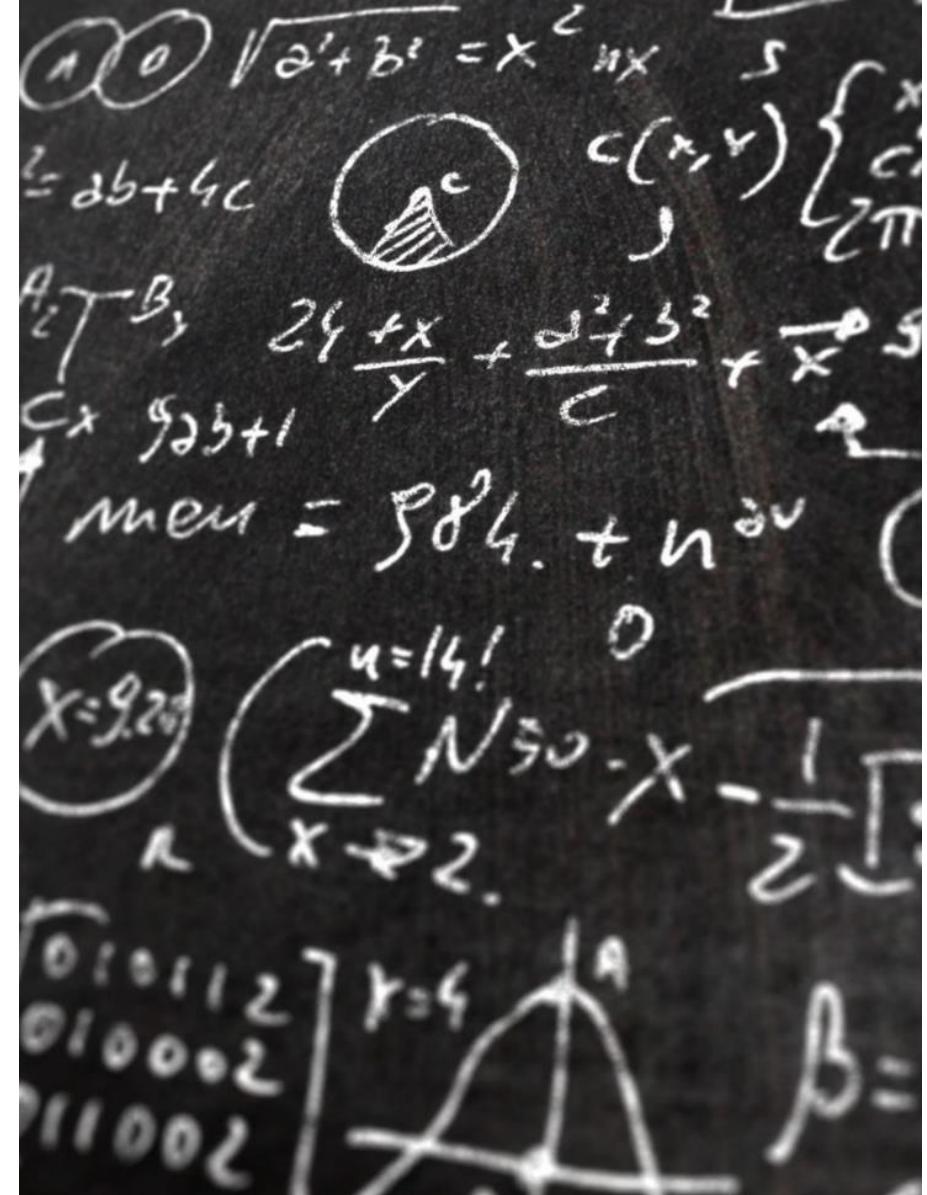


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Programmes

- Nine PhD programmes currently open for entry
- Correspond to research themes/ groups
- Apply via UoE degree finder (more later)
- Opportunities for funded places
- Typical September/ October start date
- Will start with assigned supervisor- will be specified in admission offer



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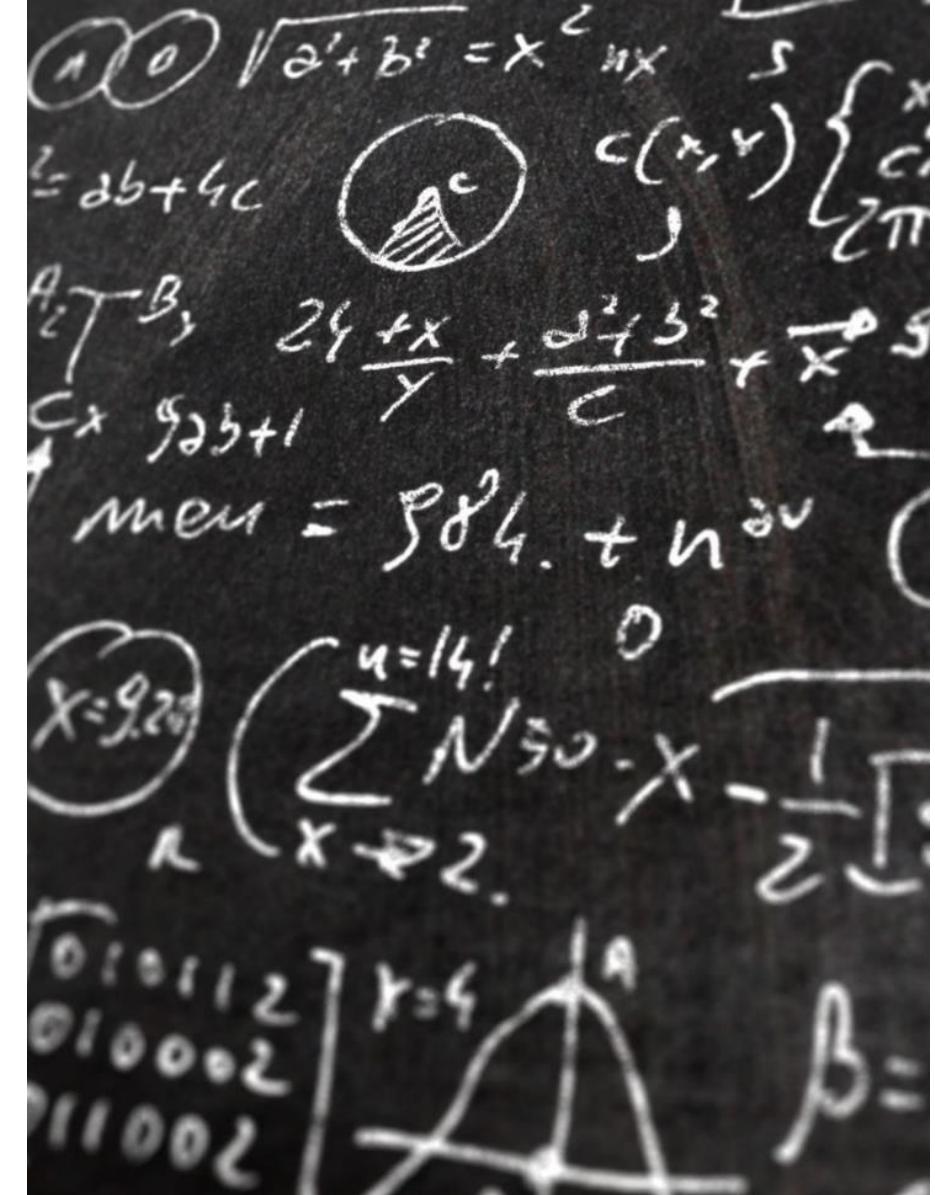
MIGS PhD Programmes

- Algebra, Geometry and Topology PhD
- Analysis PhD
- Applied and Computational Mathematics PhD
- Mathematical Physics PhD
- Mathematics Education PhD
- Optimization and Operational Research PhD
- Probability and Stochastics PhD
- Statistics PhD

All available either with or without internship, and either full time (4 years) or part time (8 years)



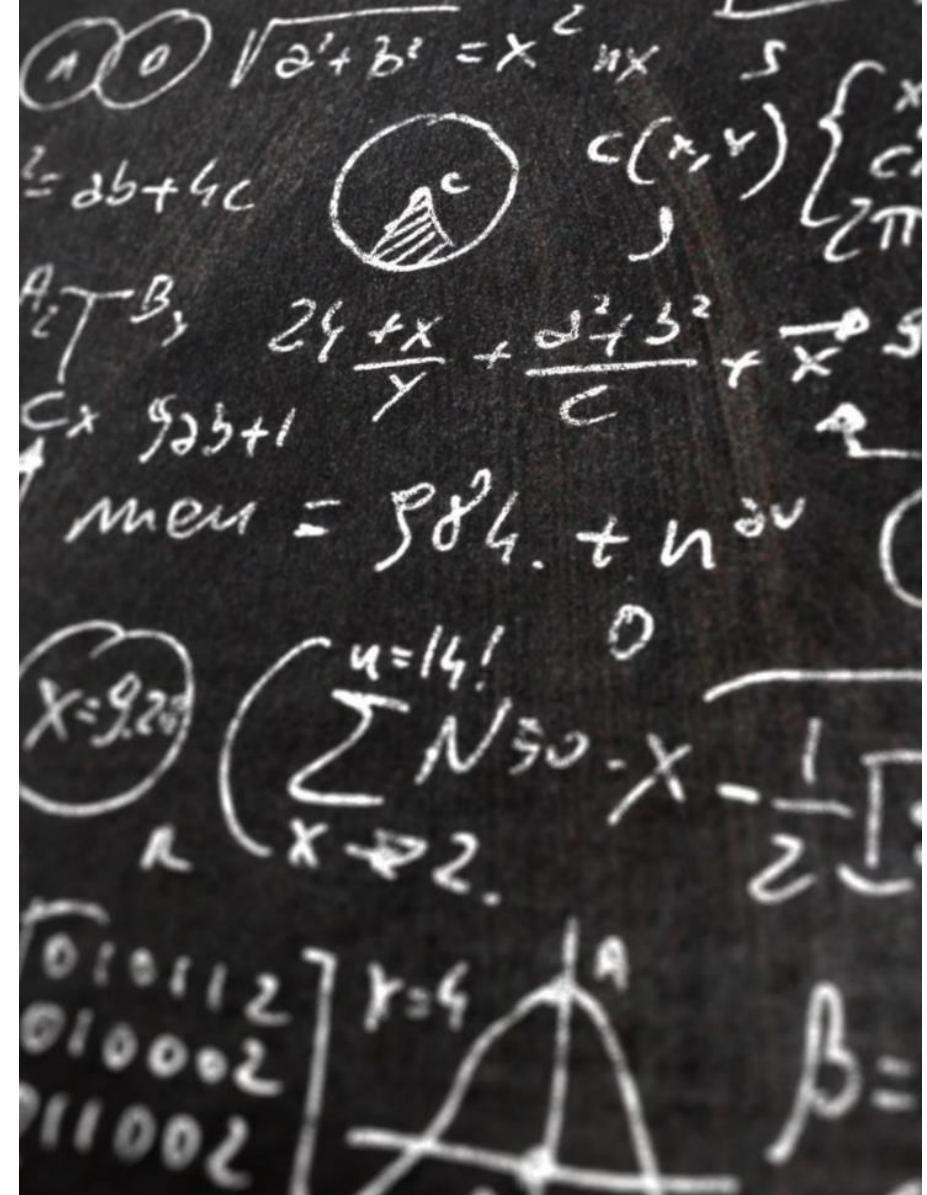
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Research

- Analysis & Probability
- → includes Financial Mathematics
- Applied and Computational Mathematics
- → Data Science & AI, Fluid Dynamics,
- Numerical Analysis, Optimisation, Inverse Problems
- Data & Decisions
- → Statistics, Operational Research
- Structure & Symmetry
- → Mathematical Physics, Algebra
- Technology Enhanced Mathematics Education

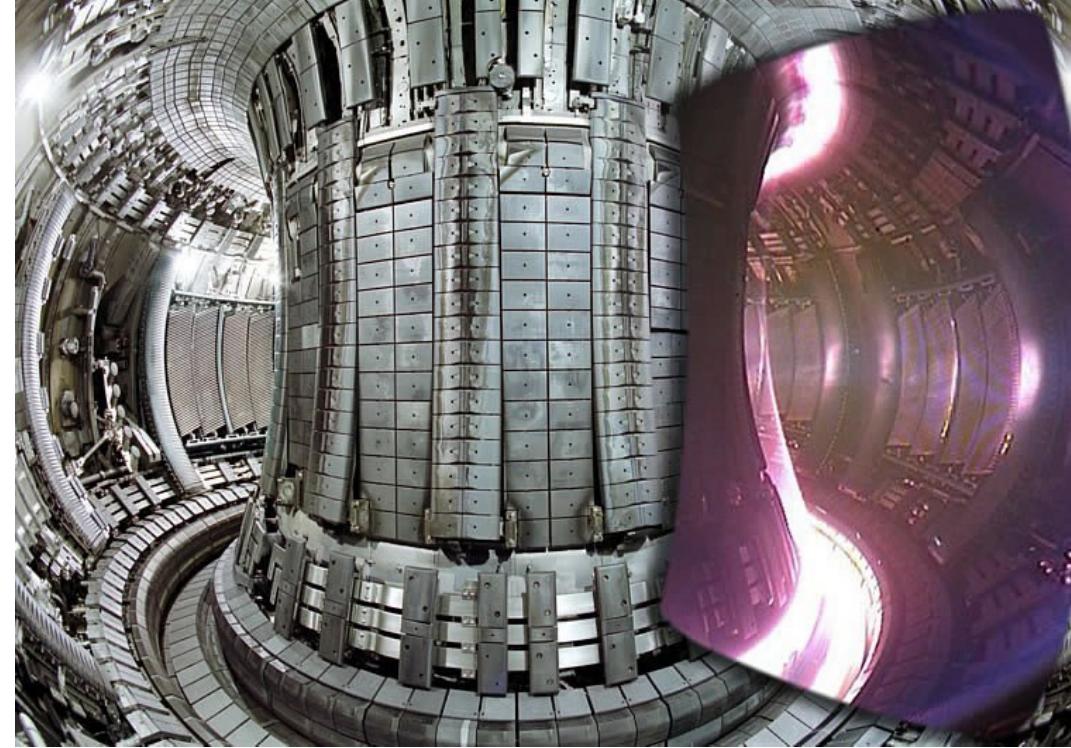


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Nuclear Fusion

- UoE Centre for Plasma Theory
- → Theoretical Plasma Physics
- → Mathematical Aspects of Plasmas
- → collaborations with UKAEA and Fusion Power CDT
- PhD studentships available



- Acceleration of plasma codes using Machine Learning
- Turbulence modelling and effects on confinement
- L-H transition
- more to come!

Funded MSc opportunities!



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EPSRC Centre for Doctoral Training Programme

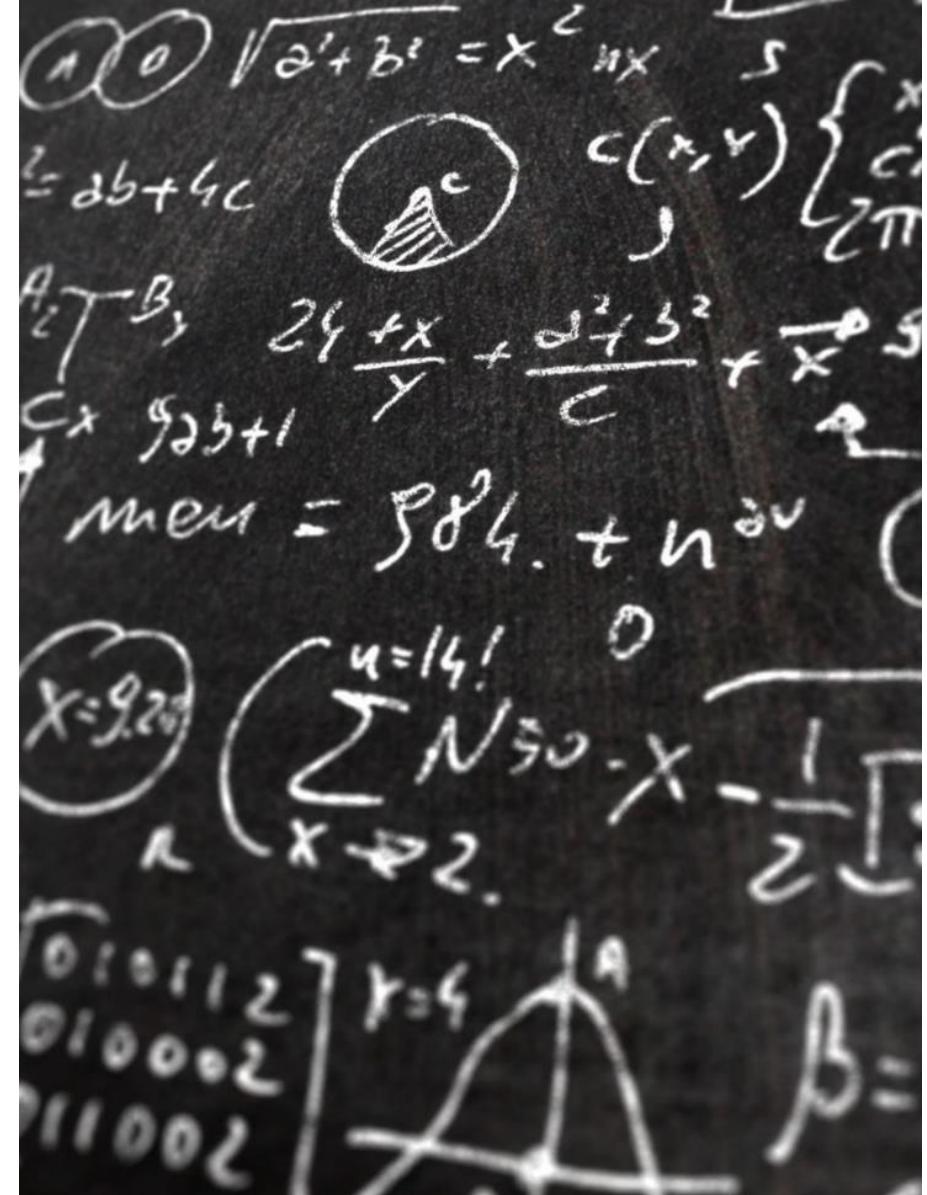
- Algebra, Geometry and Quantum Fields PhD with integrated study
- More details on the [AGQ CDT website](#)
- [Intro video - https://edin.ac/4ezfiVz](https://edin.ac/4ezfiVz)



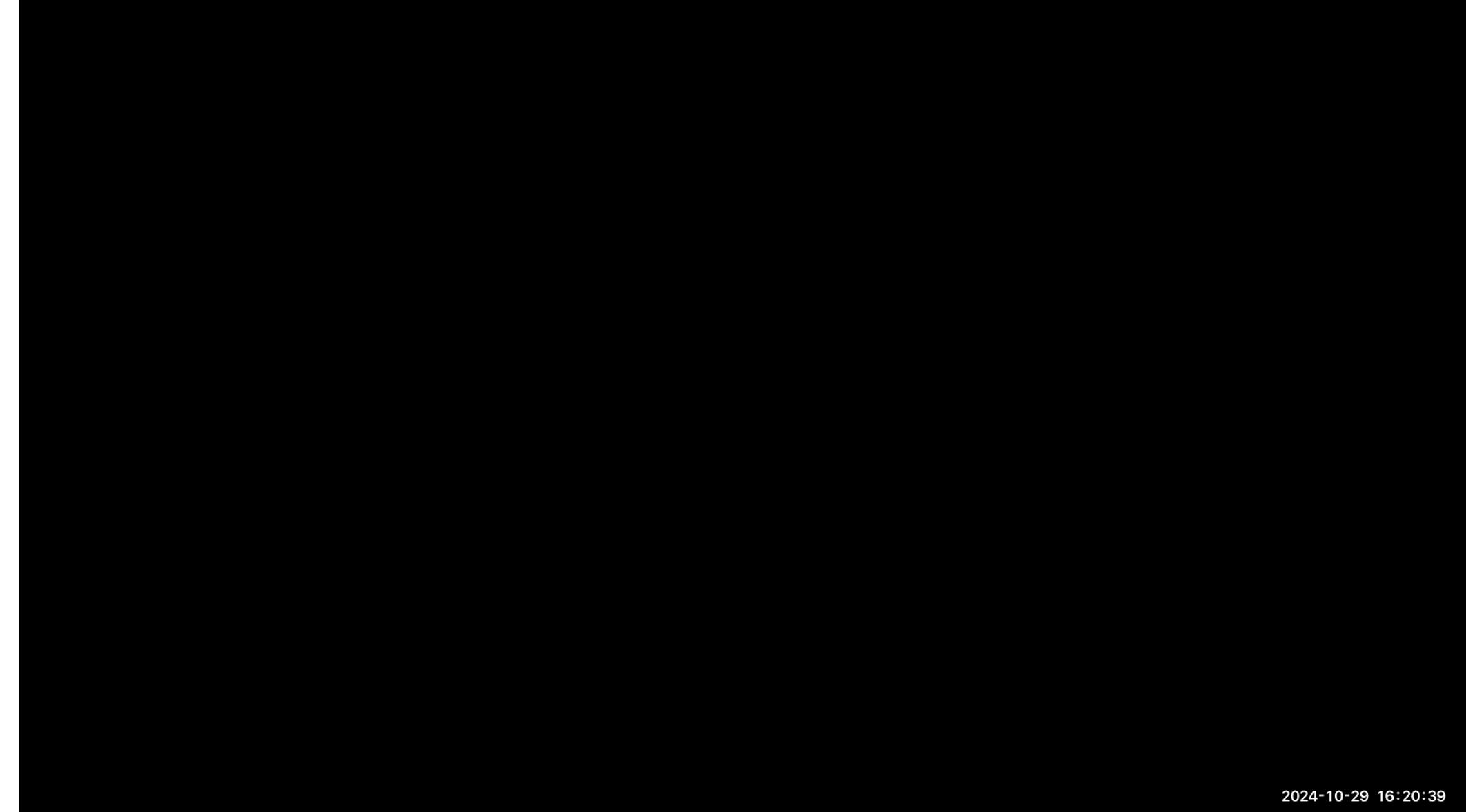
Algebra
Geometry &
Quantum Fields



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Structure and training requirements

- Programmes are 4 years in length, and you will receive 4 years of funding if offered funded place
- Training to expand and enhance mathematical knowledge
- Personal/ career development training streams-
 - - Industry
 - - Teaching
- Annual reviews to be completed each year



Application process

- Apply for the programme which corresponds to your research interest
- Academic entry requirements – [international equivalents](#)
- [English language requirements](#)
- Required documents- depending on stage of study, interim or final degree transcripts, degree certificate (if available), email addresses of two academic referees, English language certificate (if applicable), a CV.
- No need for a research proposal (other than for Mathematics Education applicants).
- Applications must be submitted via [Degree Finder](#)
- Applications to the AGQ CDT and Algebra, Geometry and Topology PhD programmes must be submitted via the [AGQ website](#)



Funding opportunities

- Several funding opportunities available each year -
 - School
 - EPSRC
 - University (i.e. EDCS)
 - China Scholarship Council
- Martingale Scholarship
- Self-funded
- Deadline in order to be considered for funding- Monday 19 January 2026



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Life in Edinburgh

- Edinburgh is a compact city with excellent transport links making it easy to get around the city and to travel around Scotland
- SoM is world-leading department covering almost all aspects of pure and applied mathematics, operational research and statistics as well as mathematics education
- The School has a welcoming and inclusive community that facilitates the opportunity for people to meet and grow together (coffee mornings etc.)
- ICMS conferences and workshops
- A PhD in mathematics can lead to a choice of career paths. We will teach you the skills required to carry out excellent research and the transferrable skills to help you develop within your chosen career path



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I'm now going to hand over to a couple of our students to tell you about themselves....



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Josh Fogg

- MMath in Mathematics at University of Manchester.
- PhD in Optimization and Operational Research under supervision of Julian Hall.



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me then and now

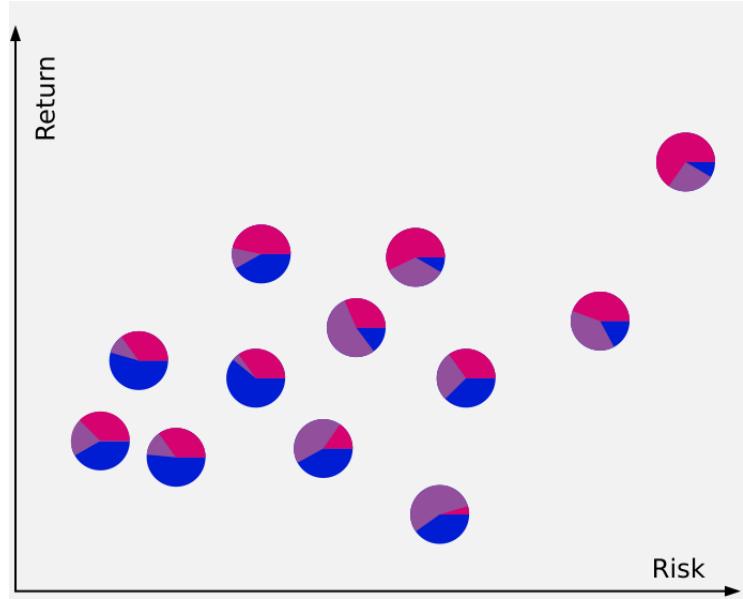


First PhD photo in 2019



Last* PhD photo in 2025

my thesis in a nutshell



“Extending algorithms used for creating robust financial portfolios to work with analogous models that manage selection in breeding programs.”

find your people



Bao Khanh Nguyen

- BEd in Teaching Mathematics in English at Hanoi National University of Education.
- MSc in Mathematics at Queen Mary University of London.
- PhD in Statistics under supervision of Torben Sell.



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About me

- 2nd year - PhD in Statistics.
- Funded by School of Math (Edinburgh)
- Work with Dr. Torben Sell, Dr. Cecilia Balocchi – *a great team to work with* 😊
- **Research interests:**
 - Bayesian Machine Learning
 - Probability AI
 - High-dimensional statistics
 - Uncertainty quantification
- **Current Project:** *Bayesian clustering for remote sensing images*



Me as a PhD in Edinburgh

- Doing research work (*which is a mood swing process 😊*)
- Attending meetings, seminars
- Doing tutoring– where I can communicate Math with students
- Attending conferences

Positives of being a PhD at UoE

- Friendly staff with various backgrounds
- Many academic activities
- Supportive administration team
- Good facilities: office, laptops, high computing system, common room, etc.
- Your mental health is concerned.
- Edinburgh is a beautiful city.



Clara Panchaud

- BSc in Mathematics at École Polytechnique Fédérale de Lausanne (EPFL).
- MSc in Statistics at Norwegian University of Science and Technology (NTNU).
- PhD in Statistics under supervision of Ruth King.



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A photograph of a woman with short, vibrant pink hair lying on her stomach on a grassy hillside. She is smiling and looking towards the camera. In the background, a large, dark, craggy hill (Arthur's Seat) rises against a sky with soft, warm colors from a setting or rising sun. The foreground is covered in tall, dry grass.

About me

- From Switzerland
- Have a bachelor's and a master's degree in Mathematics, the latter specialised in Statistics
- Moved to Edinburgh to do a PhD
- My research is in statistical ecology, I develop statistical models to estimate wildlife population sizes
- Outside of my PhD I dance a lot, great way to balance the time I spend in my head v.s. in my body!

My life as a phd student

- Research
- Supervisor meetings
- Seminars
- Tutorials
- Conferences
- Fieldwork (very specific to my research topic!)
- Involvement in other projects (in my case Piscopia)



Positives aspects and challenges

- Lots of freedom in your schedule (Really good to figure out what works for you)
- Work/Life balance
- Independence in your research that grows over time
- Stimulating environment
- Nice spaces to work at the University
- Exciting opportunities to meet other researchers and to travel
- Edinburgh is a great place to live!



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Q&A

Type your questions into the chat area

Next steps...

- Programme-specific info: <https://postgraduate.degrees.ed.ac.uk/>
- Chat to our Students: <https://edin.ac/student-chat-pg>
- Any other questions email: pgresearch@maths.ed.ac.uk



Read our students' blogs at
blogs.ed.ac.uk/studentstories



Contact details for follow-up questions

- We apologise if we did not get through all of your questions in the time allotted for this session. If you have further questions that have not been answered, please email: pgresearch@maths.ed.ac.uk



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Thank you

Further questions?

pgresearch@maths.ed.ac.uk

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