

# WILLIAM FORD

**Email:** [william.ford@polytechnique.edu](mailto:william.ford@polytechnique.edu)

**Website:** <https://wvillford.github.io/>

**Address:** 1 Rue de L'Yser, Cachan, France, 94230

**Languages:** English (Native), French (B2), German (A2)

**Phone:** +44 7580 666570/ +33 7 80 70 21 54

**Born:** 22<sup>nd</sup> May 2002, Penrith, Northern England

**Nationality:** British

## PROFILE

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PhD candidate in mathematics, jointly between CMAP, École Polytechnique and LMO Paris-Saclay. Research interests in optimal transport, calculus of variations, partial differential equations, and applications.

## EDUCATION

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**CMAP École Polytechnique/ LMO Paris-Saclay, PhD in Mathematics** 2025 – 2028

The central goal of my PhD is to better understand the quantitative stability properties of optimal transport. This is crucial for applications - to quantify errors introduced by approximations - as well from a theoretical viewpoint - to better understand the behaviour of the optimal transport problem under deformations of its marginals.

Supervisors: *Dr Michael Goldman, CMAP & Dr Cyril Letrouit, LMO Paris-Saclay.*

**IP Paris PhD track/Paris-Saclay [M2 Optimisation](#): Mention Très Bien – 18.1/20** 2024 – 2025

M2 in theoretical optimisation and links to Partial Differential Equations.

Research Internship: *Quantitative Stability in Discrete Optimal Transport, CMAP Polytechnique.*

Supervisors: *Dr Michael Goldman, CMAP & Dr Cyril Letrouit, LMO Paris-Saclay.*

**Durham University [MSc Mathematics](#): First Class – 88/100 (ranked 1<sup>st</sup> out of 25)** 2023 – 2024

Master specialising in analysis and probability (functional analysis, PDEs, stochastic analysis, ergodic theory).

Research Dissertation: *"Partial Regularity for Optimal Transport Maps Between Uniform Measures"*

Supervisor: *Dr Alpár Mészáros, Durham University.*

**Durham University [BSc Mathematics](#): First Class – 82/100 (ranked 7<sup>th</sup> out of 129)** 2020 – 2023

3 year BSc covering a range of topics in fundamental and applied mathematics.

Research Dissertation: *"Normal Families in Complex Analysis"*

Supervisor: *Dr Wilhelm Klingenberg, Durham University.*

**Queen Elizabeth Grammar School Penrith** 2013 – 2020

## AWARDS AND SCHOLARSHIPS

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2024 [Sophie Germain M2 Excellence Scholarship](#), Fondation Mathématique Jacques Hadamard.

2024 [PhD track full package M2 + PhD scholarship](#), Institut Polytechnique de Paris.

2024 [Winton MSc Memorial Prize](#) for highest scoring student in Mathematics, Durham University.

2021 [Norton Prize](#) for performance in science, St Cuthbert's Society, Durham University.

## TEACHING

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**Teaching Assistant | École Polytechnique** 2025 – 2026

How to write mathematics I (one group of 21 students), Numerical Linear Algebra (one group of 20 students)

**Teaching Assistant | Durham University** 2023 – 2024

Calculus I and Linear algebra I (two tutorial groups of 12 students)

**Mathematics Tutor | MyTutor.co.uk** 2021 – 2023

Tutored GCSE and A-level maths students in both 3 to 1 and 1 to 1 settings.