

Curriculum Vitae

Jethro Warnett

Mathematical Institute, University of Oxford
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Native Speaker in English and German

Career Summary

Research experience

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| 09.2023 - | Mathematical Institute, University of Oxford, PhD studies with José A. Carrillo and Jakub Skrzeczkowski |
| 09.2019 - 05.2021 | Computer Graphics Group, University of Bern, Research Assistant of David Bommes |

Education

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| 09.2023 - | Mathematical Institute, University of Oxford, PhD studies with José A. Carrillo and Andrea Mondino |
| 09.2021 - 12.2022 | MSc in Mathematics, ETH Zürich (Swiss Federal Institute of Technology in Zürich), Graduated with Distinction |
| 09.2018 - 03.2021 | BSc in Mathematics, University of Bern, Summa Cum Laude |

Publications

Published/Accepted Articles

1. Hui Huang, Jethro Warnett. *Well-posedness and mean-field limit estimate of a consensus-based algorithm for multiplayer games*. Communications on Pure and Applied Analysis (2025). <https://doi.org/10.3934/cpaa.2025101>
2. Martin Heistermann, Jethro Warnett, David Bommes. *Min-Deviation-Flow in Bi-directed Graphs for T-Mesh Quantization*. ACM Trans. Graph. 42, 4, Article 70 (2023), 25 pages. <https://doi.org/10.1145/3592437>

Preprints

1. José A. Carrillo, Jakub Skrzeczkowski, and Jethro Warnett. *Stein Variational Gradient Descent dynamics for highly concentrated kernels*. arXiv e-prints (2026). <https://arxiv.org/abs/2605.03627>
2. Hui Huang, and Jethro Warnett. *Well-posedness and mean-field limit estimate of a consensus-based algorithm for min-max problems*. arXiv e-prints (2026). <https://arxiv.org/abs/2602.12886>
3. José A. Carrillo, Jakub Skrzeczkowski, and Jethro Warnett. *Stein-log-Sobolev inequality and the exponential rate of convergence for the continuous Stein variational gradient descent method*. arXiv e-prints (2024). <https://arxiv.org/abs/2412.10295>

Honors, Awards, Prizes

09/2025	Stipendiary Lectureship at Queen's College (University of Oxford)
08/2025	Awarded Travel Grant for "Gradient Flows Face-to-Face" in Granada, Spain
06/2025	Awarded Travel Grant for "Conference on Mathematics of Machine Learning 2025", Hamburg, Germany
05/2025	Awarded Travel Grant for "A Junior Researcher Workshop in Optimal Transport and Applications", Santa Barbara, USA
04/2025	Awarded Travel Grant for "Special Topic School: Particles in Flow", Bonn, Germany
04/2024	Awarded Travel Grant for "Interacting Particle Systems: Analysis, Control, Learning and Computation", Providence, USA
09/2023	Stipendiary Lectureship at St. Hilda's College (University of Oxford)
09/2023	EPSRC Scholarship for Oxford University worth 46'000£
09/2023	Declined fully funded scholarship at Warwick University
07/2023	Nominated for best paper at SIGGRAPH 2023
05/2023	VMP - Best Teaching Assistant Award

Teaching experience

Queen's College (University of Oxford)

HT26	Dynamics
HT26	Differential Equation 2
MT25/26	Introductory Calculus

St. Hilda's College (University of Oxford)

TT24/25	Revision Classes
HT24	Numerical Analysis
HT24	Integration
MT23/24	Metric Spaces and Complex Analysis

Mathematical Institute, University of Oxford

MT23/24	Functional Analysis I
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ETH Zürich (Swiss Federal Institute of Technology in Zürich)

FS23	Analysis IV (Fourier Theory and Hilbert Spaces)
HS22	Analysis I
FS22	Analysis II
HS21	Analysis I: eine Variable

FS21	Analysis II
HS20	Algebra
FS20	Analysis II
HS19	Analysis I

Talks at Conferences and Workshops

12/2025	<i>22nd Oxford-Berlin Young Researcher's Meeting on Applied Stochastic Analysis</i> , Oxford, United Kingdom
09/2025	<i>Gradient Flows Face-to-Face</i> , Granada, Spain
09/2025	<i>Conference on Mathematics of Machine Learning 2025</i> , Hamburg, Germany
07/2025	<i>A Junior Researcher Workshop in Optimal Transport and Applications</i> , Santa Barbara, USA
07/2025	<i>New Perspectives in Nonlocal and Nonlinear PDEs</i> , Anacapri, Italy
03/2025	<i>AER Young Mathematicians Meeting</i> , Regensburg, Germany

Talks at Seminars

Invited Talks

05/2025	<i>Junior Analysis Seminar</i> , Imperial College London, United Kingdom
10/2024	<i>Coffee Seminar</i> , Oxford, United Kingdom

By Application

02/2025	<i>Junior Analysis and Probability Seminar</i> , Warwick, United Kingdom
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Poster Presentations

06/2025	<i>Particles in Flow</i> , Bonn, Germany
04/2025	<i>Probability, Analysis and Dynamics</i> , Bristol, United Kingdom
03/2025	<i>AER Young Mathematicians Meeting</i> , Regensburg, Germany

Academic Visits

10/2025	Visited Prof. Razvan Fetecau at Simon Fraser University, Vancouver, Canada. This was for an ongoing collaboration on the mathematical perspective of transformers.
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