Curriculum vitae

Joseph Tooby-Smith

jss85@cam.ac.uk

Education and qualifications

Oxford graduate, Cambridge PhD Researcher

2012-2014 York 6th form college:

- As-level: Biology A
- A-level: Physics A*, Maths A*, Further Maths A*, Additional Further Maths A*, Chemistry A*

2014-2018 Oxford University, Christ Church College:

- MMathPhys (with initial three years on MPhys): Distinction/First Class (double classification)

2018- Cambridge University, Robinson College and Cavendish Laboratory

- PhD Candidate Physics (HEP theory), supervised by Ben Gripaios.

Papers: Peer-reviewed

3 peer-reviewed papers

- Davighi, J., Gripaios, B., Tooby-Smith, J., 2020. Quantum mechanics in magnetic backgrounds with manifest symmetry and locality. J. Phys. A: Math. Theor. 53, 145302. https://doi.org/10.1088/1751-8121/ab78ce
- Allanach, B.C., Gripaios, B., Tooby-Smith, J., 2020. Solving local anomaly equations in gauge-rank extensions of the standard model. Phys. Rev. D 101, 075015. https://doi.org/10.1103/PhysRevD.101.075015
- Allanach, B.C., Gripaios, B., Tooby-Smith, J., 2020. Geometric general solution to the U(1) anomaly equations. J. High Energ. Phys. 2020, 65. https://doi.org/10.1007/JHEP05(2020)065

Papers: Preprints

2 preprint papers

- Cohen, T., Craig, N., Koren, S., McCullough, M., Tooby-Smith, J., 2020. Supersoft Stops. arXiv:2002.12630 [hep-ph].
- Allanach, B.C., Gripaios, B., Tooby-Smith, J., 2020. Anomaly cancellation with an extra gauge boson. arXiv:2006.03588 [hep-ph, physics:hep-th].

Prizes and awards

10 academic awards

2014 Principal's Prize (York College)

2014-2017 Scholarships (Christ Church College, Oxford)

2016 Collections Prize (Christ Church College, Oxford)

2017 The Scott Prize for best performance in the MPhys Part B examination (Oxford University)

2018 Clifford Smith Prize (Christ Church College, Oxford)

2018 Prize for the Best Results on the Oxford MMathPhys (Oxford University)

2018 Honorary Vice-Chancellor's Award (Cambridge University)

2018 Hooke Prize (Christ Church College, Oxford)

2018 Roach Prize (Christ Church College, Oxford)

Teaching Experience

Enthusiastic teacher

2016	Undertook a teaching module as part of my undergraduate
2018	Demonstrator for theoretical physics part I (Department of Physics, Cambridge)
2019-2020	Supervisor for Gauge Field Theory (Department of Physics, Cambridge)
2019	Supervisor for Quantum Field Theory (DAMTP, Cambridge)

Presentations and Conferences

1 conference organised

2019 Organising committee and a convener for the Cavendish Laboratory Graduate Student Conference

2020 Seminars on "Local anomalies in Z' models" at

- Cambridge University
- Imperial College London
- Edinburgh University
- Oxford University

Public Engagement

Committed volunteer

2016-2018	Oxford Hands on Science roadshows, and committee member (2017)
2017-2018	Oxford Physics department and Christ church college open days
2017	Volunteered at Stargazing Oxford event
2019	Volunteered at Cambridge Science Festival
2019	Helped out at Cambridge HEP master classes.

Athletic achievements

High performing athlete

2019	3rd team at National 6-stage road relays with Cambridge and Coleridge AC
2019	2nd team at National Cross Country relays with Cambridge and Coleridge AC
2019	1st in both the Oxford and Cambridge Town and Gown 10k.
2019	Represented Cambridgeshire in track-and-field.
2019	2nd Individual in Oxford Vs Cambridge Blues varsity cross-country, and team win.
2020	30th Individual in National Cross Country Championships
	Personal Bests: 1:59.4 (800m), 3:59.40 (1500m), 8:39.6 (3000m), 9:59.49 (3000m Steeple chase), 15:08.92 (5000m), 30:01 (10k).

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referees available on request