DAVID PETER WALLIS FREEBORN

www.davidpeterwallisfreeborn.com
3151 Social Science Plaza A ◇ Irvine ◇ California ◇ USA ◇ 92617
(+1) · 9493753544 ◇ dfreebor@uci.edu

EDUCATION

University of California, Irvine *September 2023 (expected)*
Doctor of Philosophy (Ph.D.), in Philosophy

London School of Economics *September 2017*
Master of Science (M.Sc.), Philosophy of Science
Dissertation: *QBism and Scientific Explanation: A Response to Timpson*

University College London *August 2016*
Doctor of Philosophy (Ph.D.), in High Energy Physics
Dissertation: *Vector boson pair production using hadronic decays of high transverse momentum bosons*

University of Oxford *September 2012*
Master of Physics (M.Phys.), with honours
Supplementary course in history and philosophy of science
Dissertation: *Gluon distribution functions in Quantum Chromodynamics in the very high energy limit*

PUBLICATIONS

Selected Journal Articles

David Peter Wallis Freeborn. Rational factionalization for agents with probabilistically related beliefs. *Synthese*, 203(2):1–27, 2024

David Peter Wallis Freeborn. The invention of new strategies in bargaining games. *Philosophy of Science*, pages 1–30, 2022

ATLAS Collaboration. Performance of the ATLAS Trigger System in 2015. *Eur. Phys. J. C*, 77(5):317, 2017 †

ATLAS Collaboration. Identification of boosted, hadronically decaying W bosons and comparisons with ATLAS data taken at $\sqrt{s} = 8$ TeV. *Eur. Phys. J. C*, 76(3):154, 2016 †

ATLAS Collaboration. Search for high-mass diboson resonances with boson-tagged jets in proton-proton collisions at $\sqrt{s} = 8$ TeV with the ATLAS detector. *JHEP*, 12:055, 2015 †

ATLAS Collaboration. Measurement of the $WW + WZ$ cross section and limits on anomalous triple gauge couplings using final states with one lepton, missing transverse momentum, and two jets with the ATLAS detector at $\sqrt{\text{s}} = 7$ TeV. *JHEP*, 01:049, 2015 †

† High publication output in particle physics is a corollary of the large size of collaborations. Here I only list papers to which I made a substantial personal contribution.

Book Reviews

David Freeborn. Darwinian evolution and scientific revolutions: Chris Haufe: How knowledge grows: the evolutionary development of scientific practice. Cambridge: The MIT press, 2022, 352 pp, $50 PB. *Metascience*, 2023

Daniel A. Herrmann and David Peter Wallis Freeborn. Wayne C. Myrvold. Beyond chance and credence: A theory of hybrid probabilities. *Philosophia Mathematica*, 2022

Works in Progress † = under review

David Peter Wallis Freeborn, Marian Gilton and Chris Mitsch, Haag's theorem: Assessment, repair, renovation

David Peter Wallis Freeborn, Marian Gilton and Chris Mitsch, Haag as a How-To Theorem

David Peter Wallis Freeborn, The epistemic role and priority of Monte Carlo simulations †

David Peter Wallis Freeborn, Rational polarization for agents with multiple, probabilistically related beliefs

Convergence and polarization for agents with Bayesian belief networks

David Peter Wallis Freeborn, The epistemic role and priority of Monte Carlo simulations †

CONFERENCES AND WORKSHOPS

Invited Talks and Symposia † = invited talk, ‡ = symposium presentation

Rational belief polarization: origins and responses, Politics, Philosophy and Economics Society Annual Meeting, New Orelans (forthcoming: 2022) ‡

Belief polarization in agents with Bayesian Belief Networks, Philosophy of Science Association, Pittsburgh (forthcoming: 2022) ‡

Identification of boosted, hadronically decaying W bosons, ATLAS UK, Brighton (2015) †

Gluon distribution functions in Quantum Chromodynamics in the very high energy limit, Munich (2012) †

Workshops and Symposia Organized
† = lead organizer

- *Session on Explaining and Modeling Belief Polarization*, Politics, Philosophy and Economics Society Annual Meeting, New Orelans (forthcoming: 2022) †
- *Symposium on the Origins of Belief Polarization*, Philosophy of Science Association, Pittsburgh (forthcoming: 2022) †
- *Philosophy of Dark Matter Workshop March*, Irvine (2021) †

Other Talks and Presentations
† = poster presentation, ‡ = invited discussant and session chair

Rational polarization for agents with multiple, related beliefs, Formal Epistemology Workshop, Irvine (2022) †

Cross-disciplinary perspectives on model-independent searches, Edinburgh (2019) ‡

Identification of boosted, hadronically decaying W bosons, ATLAS UK, Edinburgh (2014) †

AWARDS, GRANTS AND RECOGNITION

Awards and Prizes

Imre Lakatos Prize for the best Master's thesis in philosophy of science, London School of Economics (2017)

John Thresher Prize for the best Master's thesis in particle physics, University of Oxford (2012)

Award for Highest Grade in *History and Philosophy of Science*, University of Oxford (2010)

Fellowships and Scholarships

Summer Research Fellowships, University of California, Irvine (2018-2023)

Social Sciences Merit Scholarships, University of California, Irvine (2018-2023)

Provosit Ph.D. Fellowship, University of California, Irvine (2018-2023)

Graduate Dean's Recruitment Fellowship, University of California, Irvine (2018)

Merit Fellowship, London School of Economics (2016-2017)

ATLAS Ph.D. Grant, European Organization for Nuclear Research, (2014-2016)

STFC Graduate Research Funding, University College London (2012-2016)

Additional Grants and Funding

National Science Foundation Grant, *Consensus, Democracy and the Public Understanding of Science*, Funded Research Assistant (2019-2022)

John Templeton Foundation Grant, *New Directions in the Philosophy of Cosmology*, Funded Research Assistant (2018-2020)

A.G.S. Travel Grant, University of California, Irvine (2019-2022)

UK ATLAS Travel Grants, University College London, (2012-2016)

TEACHING EXPERIENCE

Instructor of Record

Advanced Topics in Responsible AI (Spring 2024, NU London)

Programming with Data (Autumn, 2023, NU London)

A.I. and Data Ethics (Autumn 2023, Spring 2024, NU London)

Inductive Logic, University of California, Irvine (Summer 2021)

Teaching Assistant

Introduction to Symbolic Logic, University of California, Irvine (Spring 2022)

Naturalized Epistemology, University of California, Irvine (Fall 2019)

The Good Life, University of California, Irvine (Spring 2019)

Critical Issues in the Social Sciences, University of California, Irvine (Winter 2019)

Critical Reasoning, University of California, Irvine (Fall 2018)

Mathematical Methods in Physics II, University College London (Spring 2014)

Mathematical Methods in Physics I, University College London (Spring 2013)

Thermal Physics, University College London (Winter 2013)

Advanced Quantum Theory, University College London (Spring 2012 and Winter 2012)

Additional Experience

Tavistock Tutors, personal tutor in mathematics, physics, chemistry, engineering and earth sciences (2016-2020)

Pedagogical Training

UCI Division of Teaching Excellence and Innovation workshop: *Putting Theories of Inclusive Teaching into Practice* (Spring 2022)

UCI Division of Teaching Excellence and Innovation workshop: *How to Design Active Learning Techniques for Students across Different Learning Backgrounds* (Spring 2022)

PROFESSIONAL SERVICE

Peeer Review

Referee: *Philosophy of Science*, *Foundations of Physics*, *Synthese*

Conferences and Workshops † = lead organizer

Session on Explaining and Modeling Belief Polarization, *Politics, Philosophy and Economics Society Annual Meeting*, New Orelans (forthcoming: 2022) †

Symposium on the Origins of Belief Polarization, *Philosophy of Science Association*, Pittsburgh (forthcoming: 2022) †

Philosophy of Dark Matter Workshop March, Irvine (2021) †

Reading and Research Groups Organized † = convener

Philosophy of Physics Group, University of California, Irvine (2021-2022) †

Game Theory and Computational Modeling Group (2019-2020) †

Philosophy of Quantum Field Theory Group, University of California, Irvine (2018-2022) †

Public Outreach and Diversity

Wonder Philosophy (2021) · *organizer, presenter and panelist*

Physics After Hours Podcast (2020) · *interviewee*

Voice of the Future (2014) · *representative for the Institute of Physics*

Royal Society Exhibtion: Understanding the Higgs Boson (2013) · *outreach ambassador*

I'm a Scientist: Get me Out of Here (2013) · *panelist*