

Curriculum Vitae

Personal information

Surname(s) / First name(s)

Wasserman, Thomas Anton

Academic Interests

Interests

Topological Quantum Field Theories, Conformal Field Theory, Higher Categories, Fusion Categories, Mathematical Quantum Field Theory, Topological Quantum Computing, Duality Groups, Simplicial Sheaves.

Employment

2021 - 2022

Stipendiary Lecturer, Lincoln College, University of Oxford

2018 - 2020

Postdoc, University of Copenhagen

Education

Period

2012 -2018¹

Program

DPhil. in Mathematics

Institution

University of Oxford

Thesis Title

“*The Reduced Tensor Product of Braided Fusion Categories over a Symmetric Fusion Category*”

Advisor

Christopher Douglas

Period

2008 - 2012

Programs

Master Mathematical Sciences and Master Theoretical Physics

Institution

Universiteit Utrecht

Combined Thesis

“*Orbifold Conformal Field Theory and One-Loop Self-Energy in the $S_N \mathbb{R}^D$ Orbifold Sigma Model*”

Advisors

André Henriques and Gleb Arutyunov

Period

2005 - 2009

Programs

Bachelor Mathematics and Bachelor Physics and Astronomy

Institution

Universiteit Utrecht

Thesis

“*Gravitational Waves from Bubble Collisions during First-Order Phase Transitions*” (Advisor: Tomislav Prokopec)

Publications

Title

The Landau-Ginzburg / Conformal Field Theory correspondence for x^d and Module Tensor Categories.

Co-Author

Ana Ros Camacho

Status

arXiv:2206.01045

Title

The Drinfeld centre of a symmetric fusion category is 2-fold monoidal

Journal and Year

Advances in Mathematics 366:107090, 2020

Title

The symmetric tensor product on the Drinfeld centre of a symmetric fusion category

Journal and Year

Journal of Pure and Applied Algebra 224(8):106348, 2020

Title

Drinfeld centre-crossed braided tensor categories

Journal and Year

Higher Structures 5(1):203-243, 2021

Title

The reduced tensor product of braided tensor categories containing a symmetric fusion category

Journal and Year

In review, *Advances in Mathematics*

¹My PhD took longer due to my father's sudden passing in December 2013.

Conferences, Talks, Visitorships.

- 2021 “*Non-Commutative Geometry Seminar*”, Leiden University, **Invited speaker**
- 2020 “*Geometry and Topology Seminar*”, University of Aberdeen, **Invited speaker**
- 2019 “*SYM 10 Years Old*”, University of Copenhagen.
- 2019 “*Loops in Leeds*”, University of Leeds, **Contributed a talk.**
- 2019 “*Research Seminar Algebra and Mathematical Physics*”, University of Hamburg, **Invited speaker.**
- 2019 “*Junior Topology and Geometry Seminar*, University of Oxford, **Contributed a talk.**
- 2018 “*Topology Seminar*”, Autonomous University of Barcelona, **Invited speaker.**
- 2018 Visitor at the University of Oxford, from March until August.
- 2017 “*Topology Seminar*”, Copenhagen University, **Invited speaker.**
- 2017 “*Geometry Seminar*”, Plymouth University, **Invited speaker.**
- 2017 “*Topology Seminar*”, University of Oxford, **Invited speaker.**
- 2017 “*LMS-CMI Research School: Algebraic Topology of Manifolds*”, Oxford
- 2017 “*Young Topology Meeting*”, Stockholm, **Contributed a talk.**
- 2017 “*Geometry and Quantum Theory Colloquium*”, Den Dolder (Joint seminar for Dutch universities), **Invited speaker.**
- 2017 “*Groups, Manifolds and K-Theory*”, Münster.
- 2016 “*Clay Mathematics Workshops and Conferences*”, Oxford.
- 2016 “*Jóvenes Investigadores X*”, Complutense University Madrid. **Invited speaker.**
- 2016 “*Young Topology Meeting*”, Copenhagen. **Contributed a talk.**
- 2016 “*Michael Weiss’ Birthday Conference*”, Lisbon.
- 2016 “*European Talbot*”, Winterberg. Topic: Topological Quantum Field Theories. Mentors: Chris Schommer-Pries and Peter Teichner. **Contributed a talk.**
- 2016 Visited Stanford University. Hosts: Ralph Cohen and Søren Galatius. **Contributed a talk in the Topology Progress Seminar.**
- 2016 “*OAC Manifolds Conference*”, Oxford.
- 2015 “*Higher Structures in Geometry and Physics*” workshop, MPIM, Bonn.
- 2015 “*Clay Mathematics Workshop on Algebraic Topology*”, Oxford.
- 2015 “*Clay Mathematics Conference*”, Oxford.
- 2015 “*Graduate Workshop on Topological Quantum Field Theory*”, Simons Centre, Stony Brook, NY.
- 2015 “*Conference on Topology and Geometry*”, HIM, Bonn.
- 2015 “*Young Topology Meeting*”, Lausanne. **Contributed a talk.**
- 2015 “*Homotopy Theory, Manifolds, and Field Theories*”, Bonn.
- 2014 “*Topological quantum field theories, quantum groups and 3-manifold invariants Masterclass*”, Copenhagen.
- 2014 “*Young Topology Meeting*”, Copenhagen. **Contributed a talk.**
- 2014 “*Algebraic Topology*” program, MSRI, Berkeley.
- 2014 “*Reimagining the foundations of algebraic topology*” workshop MSRI Berkeley.
- 2013 “*Clay Mathematics Institute conference and workshops*”, Oxford.
- 2013 “*Young Researchers in Mathematics*”, Edinburgh.
- 2013 “*Categorification and Link Homology* short course and workshop, Louvain-La-Neuve.
- 2013 “*Young Topology Meeting*”, Imperial College, London.
- 2013 “*Higher Structure 2013*” workshop, Cambridge.
- 2012 “*Aspects of Topology*”, Oxford.
- 2012 “*Quantum Gravity in Paris*”, Paris.
- 2012 “*Higher Geometric Structures along the Lower Rhine*”, Bonn.
- 2011 “*Higher Structures in Topology and Geometry IV*”, Göttingen.
- 2010 “*Geometry of gauge theories and the geometric quantization Masterclass*” at the University of Amsterdam.

Awards and Scholarships

2016	Departmental Teaching Award from the Mathematical Institute of the University of Oxford
2013	Scholarship from Prins Bernhard Cultuurfonds for a DPhil. in Mathematics at the University of Oxford (€12000)
2012	Scholarship from the Engineering and Physical Sciences Research Council for a DPhil. in Mathematics at the University of Oxford
2012	Scholarship from Dr. Hendrik Muller Vanderlandsch Fonds for a DPhil. in Mathematics at the University of Oxford (€5000)
2012	Funding from Stichting Vreedfonds for a DPhil. in Mathematics at the University of Oxford (€6000)
2012	Funding from Fundatie Vrijvrouwe van Renswoude for a DPhil. in Mathematics at the University of Oxford(€6000)
2010	Second place in the NNV's Bachelor Thesis contest at FYSICA 2010
2009	Scholarship from the Swiss government for study at the ETH Zürich for 5 months

Teaching experience and Qualifications

Period and Institution	2021-2020, Lincoln College, University of Oxford
Tasks	Tutor for first and second year Algebra modules, Admissions Tutor.
Qualification	2019, Introduction to University Pedagogy
Description	Week long intensive introduction to university pedagogy.
Period and Institution	2019 - 2020, University of Copenhagen.
Tasks	Lecturer: Graduate Courses, Supervisor: Bachelor Thesis, Reading Courses at Bachelor and Master level.
Period and Institution	2018, St. Peter's College, University of Oxford.
Title	Non-Stipendiary Lecturer in Pure Mathematics
Description	Tutor for prelims tutorials for groups and group actions.
Period and Institution	2015 - 2017, University College, University of Oxford.
Title	Junior Lecturer in Pure Mathematics
Description	Tutor for prelims tutorials for linear algebra and groups.
Period and Institution	2015, Exeter College, University of Oxford.
Title	Tutor for the Williams-Exeter Programme
Description	One-on-one tutorials with an exchange student on geometry of surfaces.
Period and Institution	2012 - 2016, Mathematical Institute, University of Oxford.
Title	Teaching Assistant, Class tutor
Description	Class tutor for Part C courses on homological algebra, algebraic topology, computational algebraic topology, and Lie groups.
Period and Institution	2008 - 2012, Universiteit Utrecht.
Title	Student assistant
Description	Teaching assistant for the second year courses on analysis and multidimensional real analysis, third year courses on functional analysis and smooth manifolds, and for the master course on Riemann surfaces.