

BRIAN R. WILLIAMS

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EMPLOYMENT

Boston University Assistant Professor	<i>2022–present</i>
University of Edinburgh Whittaker Research Fellow	<i>2020–2022</i>
Mathematical Sciences Research Institute (now SLMath) Research Fellow	<i>2020</i>
Northeastern University Zelevinsky Research Instructor	<i>2018–2020</i>

EDUCATION

Northwestern University Ph.D., Mathematics Thesis: <i>The holomorphic σ-model and its symmetries.</i> Advised by John Francis and Kevin Costello.	<i>May 2018</i>
University of Florida B.S., <i>summa cum laude</i> , Mathematics and Physics.	<i>May 2012</i>

AWARDS AND FELLOWSHIPS

- Visiting Fellow at the Center for Advanced Studies of the Ludwig-Maximilians-Universität München (2024).
- NSF Conference Grant DMS No. 2329854, *Conference: New England Algebraic Topology and Mathematical Physics Seminar (NEAT MAPS)* (2023–present).
- National Science Foundation (NSF) Graduate Research Fellowship (2012–2018).
- Perimeter Institute for Theoretical Physics graduate student fellow (2015).

ORGANIZATIONAL ACTIVITIES

Organizer <i>New England Algebraic Topology and Mathematical Physics seminar 1, 2, 3</i> , with Ben Knudsen, Chris Elliott, and Laura Murray. Northeastern, BU, Amherst.	<i>2022–</i>
Organizer <i>The BU Geometry and Physics seminar</i> , with Yu-Shen Lin. Boston University.	<i>2022–</i>
Organizer <i>Twisted QFT seminar</i> , with Tudor Dimofte. University of Edinburgh.	<i>2021</i>

Organizer 2020–2022

The Hodge seminar. University of Edinburgh.

Organizer 2020

Physical Mathematics of Quantum Field Theory, with Chris Elliott, Owen Gwilliam and Matteo Lotito.
Online seminar.

Organizer 2018–2019

Joint MIT/Northeastern RTG Seminar, with Pavel Etingof and Valerio Toledano–Laredo. MIT and Northeastern.

ADVISEMENT AND MENTORSHIP

Ph.D. Committee member Boston University

- Greyson Potter (defended 2023), Sam Bardwell-Evans (defended 2023).

Undergraduate Thesis Committee Member Boston University

- Chris (Quinn) LaFond (2023).

Undergraduate Thesis Advisor University of Edinburgh

- Lucy Spouncer (2022).

TEACHING

Boston University 2022–

- Topics classes in geometry, Differential Geometry II, Differential Topology I, Calculus 1.

University of Edinburgh 2020–2022

- Tutor for Honours Algebra, Skills Lab; Tutor for Fundamentals of Pure Mathematics; Course Organizer for advanced undergraduate topics class in complex geometry.

Northeastern University 2018–2019

- Calculus 1 (Honors), graduate topics classes in geometry and topology, linear algebra.

Northwestern University 2012–2018

- Calculus 1, Linear Algebra (Honors), Complex Variables, Partial Differential Equations.

INVITED LECTURE SERIES

Thematic Program on Arithmetic, Geometry, and Physics: Higher Algebraic Structures. 2022

Twisted holography, Korean Institute for Advanced Study (KIAS).

LMS Autumn Summer School. 2020

Infinite dimensional Lie algebras and their multivariable generalizations.

Factorization Algebras and Functorial Field Theory at Oberwolfach in Germany. 2016

Observables of QFT in the BV-formalism, Oberwolfach.