Bryan W. Kettle

Curriculum Vitae

Department of Mathematical and Statistical Sciences
University of Alberta
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Edmonton, Alberta, Canada

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Education

University of Alberta   **Edmonton, AB, Canada**
PhD in Mathematics   Sep 2018 - Fall 2023 (Expected)
Advisor: Dr. Nicolas Guay
Dissertation: *Orthosymplectic, Periplectic, and Twisted Super Yangians*

University of Western Ontario   **London, ON, Canada**
MSc in Mathematics   Sep 2017 - Oct 2018
Advisor: Dr. Janusz Adamus

Memorial University of Newfoundland   **St. John's, NL, Canada**
BSc (Honours, First Class) in Pure Mathematics   Sep 2012 - Jun 2017
Advisor: Dr. Yorck Sommerhäuser

Research Interests

The algebraic structure and representation theory of quantum groups, such as super Yangians and twisted super Yangians.

Teaching Experience

University of Alberta   Sep 2018 - Apr 2023
Graduate Teaching Assistant

As a Laboratory Instructor:
- Math 100 Calculus I Lab   Fall 2018, 2020, 2021
- Math 101 Calculus II Lab   Spring 2019
- Math 102 Applied Linear Algebra Lab   Winter 2019, 2020, 2021, 2022
- Math 209 Calculus III Lab   Fall 2019

As a Tutor:
- Decima Robinson Support Centre   Fall 2018, 2019, 2021;
                                                      Winter 2019, 2020, 2021

As a Course Grader:
- Math 125 Linear Algebra I   Spring 2019
- Math 260 Mathematical Reasoning for Teachers   Spring 2021
- Math 322 Graph Theory   Spring 2020, Fall 2022
- Math 324 Elementary Number Theory   Fall 2020
- Math 325 Linear Algebra III   Winter 2021, Winter 2023
- Math 326 Rings and Modules   Winter 2019

University of Western Ontario   Sep 2017 - Apr 2018
Graduate Teaching Assistant

As a Tutor:
- Math Help Centre   Fall 2017, Winter 2018

As a Course Grader:
- Calc 1000A Calculus I   Fall 2017
- Math 1225B Methods of Calculus   Winter 2018

Memorial University of Newfoundland   Sep 2016 - Apr 2017
Teaching Assistant

As a Course Grader:
- Math 1000 Calculus I   Fall 2016
- Math 1051 Finite Mathematics II   Fall 2016
- Math 1090 Algebra and Trigonometry   Fall 2016, Winter 2017

Scholarships & Awards

- *J. Gordin Kaplan Graduate Student Award* (2023) University of Alberta.
- *Graduate Student Teaching Award* (2023). University of Alberta.
- *Dr. Josephine M. Mitchell Research Scholarship* (2022). University of Alberta.
- *Eoin L. Whitney Scholarship* (2020). University of Alberta.
- *University of Alberta Doctoral Recruitment Scholarship* (2018). University of Alberta.

Presentations

- *Super Yangians: Where We Are Today.* PIMS-USask Geometry, Algebra and Physics Seminar at the University of Saskatchewan, May 2022.
- *A Friendly Introduction to Representation Theory.* Mathematical and Statistical Sciences Graduate Colloquium at the University of Alberta, October 2021.
- *A Friendly Introduction to Representation Theory.* Mathematical and Statistical Sciences Graduate Colloquium at the University of Alberta (Virtual), February 2021.

- *Dualizing Algebras.* Graduate Algebra Seminar at the University of Alberta, January 2020.
- *Introduction to Hopf Algebras.* Graduate Class Seminar at the University of Western Ontario, December 2017.
- *Yetter-Drinfel'd Modules and the Radford Projection Theorem.* Bachelor Thesis Public Presentation at the Memorial University of Newfoundland, April 2017.
- *Olshansky's Modification of Golod's Example of Non-Nilpotent Finitely Generated Nil-Algebras.* Algebra Seminar at the Memorial University of Newfoundland, October 2016.

Conferences Attended

- *Workshop on Symmetric Spaces, Their Generalizations, and Special Functions.* University of Ottawa, August 2022.
- *Quantum Field Theories and Quantum Topology Beyond Semisimplicity.* Banff International Research Station, November 2021.
- *QRST: Quantum Groups, Representation Theory, Superalgebras, and Tensor Categories.* University of Ottawa (Virtual), August 2020.
- *Hopf Algebras, Algebraic Groups, and Related Structures.* Memorial University of Newfoundland, June 2016.
- *Algebraic Groups and Lie Algebras.* Bonne Bay Marine Station of Memorial University of Newfoundland, August 2015.

Volunteering

- Treasurer and Pure Math Representative of SIGMAS (Society in Graduate Mathematics and Statistics) at the University of Alberta (Sep 2019 - Aug 2022).
- Representative for the University of Alberta Graduate Program in Mathematics at the 2021 Canadian Undergraduate Mathematics Conference (Aug 2021).
- Proctor for the Blundon Seminar Camp at the Memorial University of Newfoundland (May 2016).