

JAIMAL THIND

CURRICULUM VITAE

Office Address

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Personal

- Citizenship: Canadian
- Languages: Fluent in English and French

Education

- (1) **University of Toronto**
Hon. B.Sc. in Mathematics with High Distinction, 1998-2002.
M.Sc. in Mathematics, 2002-2003.
- (2) **State University of New York - Stony Brook**
Ph.D. in Mathematics, 2003-present.

Research Interests

- (1) **Representation Theory:** Lie algebras, Quantum groups, Quiver Theory, Cluster Algebras.
- (2) **Combinatorics:** Combinatorial Representation Theory, Combinatorics of Root Systems and Coxeter Groups.
- (3) **Category Theory:** Derived and Triangulated Categories, Cluster Categories, Braided Tensor Categories, Higher Categories, Categorification.
- (4) **Algebraic Geometry:** Geometric Representation Theory, Moduli Spaces of Representations, Geometric McKay Correspondence.
- (5) **Low Dimensional Topology:** Knot Homologies, Topological Quantum Field Theory, Quantum Invariants.

Honours and Awards

- (1) Natural Sciences and Engineering Research Council of Canada (NSERC) Undergraduate Student Research Award, 2001.
- (2) NSERC Undergraduate Student Research Award, 2002.
- (3) Ontario Graduate Scholarship 2002-2003.
- (4) NSERC Post-Graduate Scholarship, 2003 (declined).

Publications and Preprints

- (1) A. Kirillov Jr., J. Thind “Coxeter Elements and Periodic Auslander-Reiten Quiver”, arXiv:math/0703361
- (2) A. Kirillov Jr., J. Thind “Coxeter Elements and Root Bases”, arXiv:math/0811.2324

Talks

- (1) “Coxeter Elements and Periodic Auslander-Reiten Quiver”, MAXIMALS Seminar, University of Edinburgh, Edinburgh, Scotland, October 28, 2008.
- (2) “Coxeter Elements and Periodic Auslander-Reiten Quiver”, Graduate Student Seminar, 2008 Summer School, Institut Fourier, Grenoble, France, June 20, 2008.
- (3) “Coxeter Elements and Periodic Auslander-Reiten Quiver”, Algebra, Geometry and Physics Seminar, SUNY - Stony Brook, February 27, 2008 .
- (4) “Quivers and Reflection Functors”, Graduate Student Seminar, SUNY - Stony Brook, November 14, 2007.
- (5) “An Introduction to Khovanov Homology”, Graduate Student Seminar, SUNY - Stony Brook, November 30, 2005.
- (6) “Finite Type Knot Invariants”, Mathematical Physics Learning Seminar, SUNY - Stony Brook, February 18, 2005.

Teaching

- (1) Teaching Assistant, Department of Mathematics, State University of New York - Stony Brook, 2003-present.
 - (a) Lecturer for the following courses:
 - MAT 401 (Seminar in Mathematics - Knot Theory)
 - MAT 312 (Applied Algebra)
 - MAT 130 (Functions)
 - MAT 127 (Calculus C)
 - MAT 125 (Calculus)
 - MAT 123 (Precalculus)
 - (b) Teaching Assistant for the following courses:
 - MAT 205 (Calculus III - Multivariable Calculus)
 - MAT 203 (Calculus III with Applications)
 - MAT 126 (Calculus B)
 - MAT 125 (Calculus A)
 - MAT 123 (Precalculus)
 - MAT 118 (Mathematical Thinking)
 - (c) Grader for the following courses:
 - MAT 313 (Abstract Algebra)
 - MAT 535 (Algebra II)
- (2) Teaching Assistant, Department of Mathematics, University of Toronto, 2001-2003.
 - (a) Teaching Assistant for the following courses:
 - MAT 135Y (Calculus I)
 - MAT 223H (Linear Algebra I)

Service

- (1) Co-chair of the Social Committee of the Mathematics Graduate Student Association, Department of Mathematics, University of Toronto, 2002-2003 academic year.
- (2) Student Representative on the Graduate Committee, Department of Mathematics, SUNY - Stony Brook, 2006-2007 academic year.

Conferences and Summer Schools Attended

- (1) “Summer School - Geometric Methods in Representation Theory”, Institut Fourier, Grenoble, France, June 16 - July 4, 2008.
- (2) “Lie Theory and Geometry - The Mathematical Legacy of Bertram Kostant”, Pacific Institute for Mathematical Sciences, Vancouver, Canada, May 26-31, 2008.
- (3) “Topics in Combinatorial Representation Theory”, Mathematical Sciences Research Institute, Berkeley, USA, March 17-21, 2008.
- (4) “Summer School - Derived Categories in Algebraic Geometry”, University of Utah, Salt Lake City, USA, June 4-16, 2007.
- (5) “Geometry and Representation Theory- A conference in honour of George Lusztig” MIT, Cambridge, USA, 2005.
- (6) “Braids, Links and Mapping Class Groups - A conference in honour of Joan Birman”, Columbia University, New York, USA, 2005.