# **ASILATA BAPAT**

Mathematical Sciences Institute The Australian National University Canberra, ACT, 2601, Australia asilata.bapat@anu.edu.au https://asilata.github.io

#### **EMPLOYMENT**

2018– The Australian National University, Canberra

Lecturer.

2016–2017 University of Georgia

Limited Term Assistant Professor.

#### **EDUCATION**

2010–2016 The University of Chicago

M.S. in Mathematics received June 2012. Ph.D. in Mathematics received June 2016.

Advisor: Prof. Victor Ginzburg

Spring 2015 Visitor at the Max Planck Institute for Mathematics

2006–2010 Massachusetts Institute of Technology

B.S. in Mathematics with Computer Science. GPA 4.9 out of 5.

#### PREPRINTS AND PUBLICATIONS

• The Strong Topological Monodromy Conjecture for Coxeter Hyperplane Arrangements (with Robin Walters).

To appear in Mathematical Research Letters.

- The Bernstein-Sato b-function of the Vandermonde determinant (with Robin Walters).
- Torus actions and tensor products of intersection cohomology. *Pacific Journal of Mathematics*, 276 (1):19–34, 2015.
- Lower central series of free algebras in symmetric tensor categories (with David Jordan). *Journal of Algebra*, 373:299–311, 2013.

#### GRANTS AND AWARDS

2016-2018	AMS–Simons travel grant
2016	Nadine Kowalsky Prize, University of Chicago
2015	DAAD (German Academic Exchange Service) short-term research grant
2014-2015	Jerry Rao Fellowship, University of Chicago
2014	Lawrence and Josephine Graves Teaching Prize, University of Chicago
2010-2012	Amick Fellowship, University of Chicago
2010	Phi Beta Kappa, MIT
2009	Rogers Prize for best paper, Summer Program in Undergraduate Research, MIT
2005	Indian National Mathematical Olympiad (INMO) scholarship
2003, 2005	Gold and silver medals, International Astronomy Olympiad, as a member of the Indian delegation

### INVITED TALKS AND PRESENTATIONS

Mar 2017	Geometric representation theory seminar, University of Toronto
Mar 2017	Algebraic Geometry, Arithmetic Geometry, and Commutative Algebra Seminar, University of South
	Carolina
Mar 2017	AMS Spring Southeastern Sectional Meeting (special session)
Jan 2017	AMS Joint Mathematical Meeting (special session)
DEC 2016	Mathematics Seminar, Indian Institute of Science Education and Research
Nov 2016	Algebra Seminar, University of Georgia
SEP 2016	Algebra Seminar, University of Georgia
Jun 2016	Young Women in Representation Theory, University of Bonn
FEB 2016	Algebraic Geometry Seminar, Ohio State University
Jan 2016	Algebra Seminar, University of Alberta
OCT 2015	AlGeCom 12, University of Michigan (poster presentation)
OCT 2015	AMS Central Fall Sectional Meeting, Loyola University (poster presentation)
SEP 2015	Algebraic Geometry/Commutative Algebra Seminar, University of Notre Dame
May 2015	Oberseminar Representation Theory, University of Bonn
May 2015	Number Theory and Algebraic Geometry Seminar, Katholieke Universiteit Leuven
May 2015	Oberseminar Algebra, Mathematisches Institut, University of Cologne
Jul 2014	Mathematics Seminar, Indian Institute of Science Education and Research
Jun 2014	Summer school on quiver Hecke algebras (expository)
May 2014	Workshop on Yangians and quantum loop algebras (expository)

## TEACHING

	University of Georgia
2016-2017	Instructor for Calculus I and II for Science and Engineering (Math 2250 and 2260).
	The University of Chicago
2015-2016	Instructor for IBL Honors Calculus (Math 161, 162, and 163).
2014-2015	Instructor for Studies in Mathematics I and II (Math 112 and 113).
Summer 2014	Instructor for Linear Algebra (Math 19620).
2013-2014	Instructor for Calculus I, II, and III (Math 151, 152, and 153).
2012-2013	Instructor for Calculus I, II, and III (Math 151, 152, and 153).
2011-2012	Teaching assistant for Honors Algebra I, II, and III (Math 257, 258, and 259).
	Canada/USA Mathcamp
Summer 2017	Visiting faculty. Taught a course on quiver representations.
Summer 2015	Academic co-coordinator. Coordinated the academic schedule, invited visiting speakers, and
	taught a variety of undergraduate-level courses.
Summer 2013	Mentor. Taught a variety of undergraduate-level courses.
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Summer 2012	Mentor. Taught a variety of undergraduate-level courses.
SUMMER 2012 SUMMER 2011	Mentor. Taught a variety of undergraduate-level courses.  Visiting mentor. Taught a course on group theory.

## SERVICE

2016-	Co-organizer of the UGA algebra seminar.
2013-2015	Vice-president for the University of Chicago chapter of the Association for Women in Mathematics.
2012-2014	Organizer of a graduate student representation theory seminar, University of Chicago.
2011-2012	Co-organizer of the weekly graduate student seminar, University of Chicago.
2012-2014	Mentor for Directed Reading Program, University of Chicago (four projects).
2011	Mentor for REU, University of Chicago.
2009	Proofreader for the book P, NP, and NP-completeness: The Basics of Computational Complexity by Oded
	Goldreich.

## Conferences Attended

Mar 2017	AMS Spring Southeastern Sectional Meeting, Charleston
Jan 2017	AMS Joint Mathematical Meeting, Atlanta
Jun 2016	Young Women in Representation Theory, Hausdorff Research Institute for Mathematics
May 2016	Algebraic Groups, Quantum Groups and Geometry, University of Virginia
May 2016	Advances in Geometric Representation Theory, University of Michigan
OCT 2015	Algebra, Geometry, and Combinatorics Day 12, University of Michigan
OCT 2015	Workshop on Springer Theory and Related Topics, University of Massachusetts Amherst
OCT 2015	AMS Central Fall Sectional Meeting, Loyola University
Mar-Apr	Conference on the interaction of representation theory with geometry and combinatorics, Haus-
2015	dorff Research Institute for Mathematics
SEP 2014	Heidelberg Laureate Forum 2014
SEP 2014 SEP 2014	Introductory Workshop: Geometric Representation Theory, MSRI
SEP 2014 AUG 2014	Connections for Women: Geometric Representation Theory, MSRI
JUN 2014	Conference on geometric representation theory, Institut d'Études Scientifiques
JUN 2014 JUN 2014	Summer school on quiver Hecke algebras, Institut d'Études Scientifiques
MAY 2014	Workshop on Yangians and quantum loop algebras
NOV 2013	Algebra, Geometry, and Combinatorics Day 9, Loyola University
NOV 2013 AUG-SEP 2013	Gelfand Centennial Conference, MIT
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Mar 2013	Graduate student workshop on moduli spaces and Bridgeland stability, University of Illinois at
	Chicago
AUG 2012	Workshop in categorical representation theory, University of Oregon
APR 2012	Geometry of derived categories and representation theory, Northeastern University
May 2011	Examples of geometries, Ohio State University
SEP 2009	Women in mathematics in New England, Smith College