Curriculum Vitae
Mihai D. Staic

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Department of Mathematics and Statistics

Bowling Green State University

I. ACADEMIC DEGREES

Doctor of Philosophy, Mathematics, State University of New York, Buffalo   June 2007
Dissertation title: *Quantum Groups at the Intersection Between Algebra and Geometry*
Ph.D. Advisor: Dr. Samuel D. Schack

Master of Science, Mathematics, University of Bucharest, Romania   June 1998
Dissertation title: *Multiplier Hopf Modules*

Bachelor of Science, Mathematics, University of Bucharest, Romania   June 1997

II. ACADEMIC POSITIONS

Associate Professor (tenure), BGSU, Bowling Green, OH   2017–

Assistant Professor (tenure-track), BGSU, Bowling Green, OH   2011–2017

Visiting Assistant Professor, DePaul University, Chicago, IL   2010-2011

Zorn Postdoctoral Fellow, Indiana University, Bloomington, IN   2007-2010

Instructor/Teaching Assistant, SUNY at Buffalo, Buffalo, NY   2001-2007

Researcher, Institute of Mathematics of the Romanian Academy,   1999-

Assistant Researcher, Institute of Mathematics of the Romanian Academy,   1998-1999

III. RESEARCH INTERESTS

Algebra and Topology

• Quantum Groups, Homology, Tensor Categories, Low dimensional topology, Homotopy theory, Cohomology and Deformation Theory.

IV. RESEARCH PROJECTS AND GRANTS

.

(Co-PI) for NSF grant to support the: *49th Annual Spring Topology and Dynamical Systems Conference*, (the PI is Xiangdong Xie, and co-PI Rieuwert Blok and Elmas Irmak) **Awarded 2015**

Co-PI for the grant: *Hopf Algebras in category theory, representation theory and* 2011-2015 *combinatorics.* Supported by the Romanian National University Research Council.

Co-PI for the grant: *Hopf algebras, cyclic homology and monoidal categories* 2009-2011 Supported by the Romanian National University Research Council.

V. PUBLICATIONS

1. Samuel Carolus, **Mihai D. Staic**, G-Algebra Structure on the Higher Order Hochschild Cohomology $H^*_{S^2}(A, A)$ arXiv:1804.05096, submitted (2018).

2. Alina Petescu-Nita, **Mihai D. Staic**, Automorphisms of the k-algebra $k[X_1, ..., X_m]$, arXiv:1710.08022, to appear in *Journal of Algebra and Its Applications.*

3. Florin Panaite, Paul Schrader, **Mihai D. Staic**, Hom-Tensor Categories and the Hom-Yang-Baxter Equation. arXiv:1702.08475, submitted (2017).

4. Jacob Laubacher, **Mihai D. Staic** and Alin Stancu, Bar Simplicial Modules and Secondary Cyclic (Co)homology, arXiv:1605.03273, submitted (2016).

5. Bruce R. Corrigan-Salter and **Mihai D. Staic**, Higher Order and Secondary Hochschild Cohomology, *C. R. Math. Acad. Sci. Paris* **354** (2016), no. 11, 1049–1054.

6. **Mihai D. Staic**, Secondary Hochschild Cohomology, *Algebra and Representation Theory*, **19** (2016), 47–56.

7. **Mihai D. Staic** and Alin Stancu, Operations on the Secondary Hochschild Cohomology, *Homology Homotopy Appl.*, **17** (2015), 129–146.

8. Mike Hughes, **Mihai D. Staic** and Xie Xiangdong, Classification of a class of nonrigid Carnot groups, *Journal of Lie Theory*, **25** (2015), 717–732.

9. **Mihai D. Staic** and Alina Nita-Petrescu, Symmetry group of two special types of carbon nanotori, *Acta Crystallogr.* Sect. A, Volume **69** (4), (2013), 435–439.

10. Florin Panaite and **Mihai D. Staic**, More examples of pseudosymmetric braided categories, *Journal of Algebra and Its Applications*, **12** (4), (2013), 1250186, 21 pp.

11. **Mihai D. Staic**, An explicit description of the simplicial group $K(A, n)$, *J. Aust. Math. Soc.*, **95** (2013), 133–144.

12. **Mihai D. Staic**, Secondary Cohomology and k-invariants, *Bull. Belg. Math. Soc.*, **19**(3) (2012), 561-572.

13. **Mihai D. Staic** and Vladimir Turaev, Remarks on 2-dimensional HQFT's, *Algebraic and Geometric Topology*, **10** (2010), no. 3, 1367–1393.

14. Florin Panaite, **Mihai D. Staic** and Freddy Van Oystaeyen, Pseudosymmetric braidings, twines and twisted algebras, *Journal of Pure and Applied Algebra*, **244** (2010), no. 6, 864–887.

15. Florin Panaite and **Mihai D. Staic**, A quotient of the braid group related to pseudosymmetric braided categories, *Pacific Journal of Mathematics*, **144** (2010), no.1, 155–167.

16. **Mihai D. Staic**, From 3-algebras to Δ-groups and symmetric cohomology, *Journal of Algebra*, **322** (2009), no. 4, 1360-1378.

17. **Mihai D. Staic**, Symmetric cohomology of groups in low dimension, *Archiv der Mathematik*, **93** (2009), no. 3, 205–211.

18. Florin Panaite and **Mihai D. Staic**, Generalized (anti) Yetter-Drinfeld modules as components of a braided T-category, *Israel Journal of Mathematics*, **158** (2007), 349–365.

19. Florin Panaite, **Mihai D. Staic** and Freddy Van Oystaeyen, On some classes of lazy cocycles and categorical structures, *Journal of Pure and Applied Algebra*, **209** (2007), no. 3, 687–701.

20. **Mihai D. Staic**, A note on anti-Yetter-Drinfeld modules, *Hopf algebras and generalizations*, *Contemporary Mathematics*, **441** (2007), 149–153.

21. **Mihai D. Staic**, Pure-braided Hopf algebras and Knot invariants, *Journal of Knot Theory and its Ramifications*, **13** (2004), no. 3, 385-400.

22. **Mihai D. Staic**, Pseudo-quasitriangular subbialgebras of Quantum Systems, *Communications in Algebra*, **30** (2002), no. 5, 2133-2141.

23. **Mihai D. Staic**, On the dimension of irreducible modules of a semisimple Hopf algebra, *Communications in Algebra*, **30** (2002), no. 1, 437-442.

VI. PAPERS READ TO PROFESSIONAL SOCIETIES

1. Conferences

• A Conference Honoring Murray Gerstenhaber's 90th and Jim Stasheff's 80th birthday, University of Pennsylvania, Philadelphia, PA   March 5-8, 2018.

• 1131st Meeting of the AMS, University of North Texas, Denton, Texas,   September 9-10, 2017

• Ohio State Denison Mathematics Conference, OSU, Columbus, Ohio   May 13 - May 15, 2016

Contributed Talk: *Secondary Hochschild Cohomology*

• The Eighth Congress of Romanian Mathematicians, University of Iaşi, Iaşi, Romania, June 26 - July 1, 2015

Contributed Talk: *Operations on the Secondary Hochschild Cohomology*

• 1100th Meeting of the AMS, Texas Tech University, Lubbock, Texas,   April 11-13, 2014

Contributed Talk: *Secondary Hochschild Cohomology*

• 117th Annual Meeting of the AMS, New Orleans, Louisiana   January 2011

Contributed Talk: *Simplicial objects from commutative Hopf algebras*

• 1052nd Meeting of the AMS, University Park, Pennsylvania   October 24-25, 2009

Contributed Talk: *Secondary Cohomology and k-invariants*

• 1039th Meeting of the AMS, Claremont, California   May 3-4, 2008

Contributed Talk: *Pseudosymmetric braidings and Yetter-Drinfeld modules*

- 113$^{\text{th}}$ Annual Meeting of the AMS, New Orleans, Louisiana   January 2007

Contributed Talk: *Symmetric Cohomology for Groups*

- Workshop on Geometric Methods in Group Theory, Carleton University, Ottawa
August 2006

Contributed Talk: Δ-*groups and Lattice Field Theory*

- 112$^{\text{th}}$ Annual Meeting of the AMS, San Antonio, Texas   January 2006

Contributed Talk: *Strong 3-algebras and a 2-group Associated to Manifolds*

- 1001$^{\text{st}}$ Meeting of the AMS, Evanston, Illinois   October 23-24, 2004

Contributed Talk: *A Note on anti-Yetter-Drinfeld Modules*

- 5$^{\text{th}}$ Congress of the Romanian Mathematicians, Pitesti, Romania   June 22-28, 2003

Contributed Talk: *Pure-braided Hopf Algebras*

- 986$^{\text{th}}$ Meeting of the AMS, Courant Institute, New York   April 12-13, 2003

Contributed Talk: *Pure-braided Hopf Algebras*

- Workshop on the Categorical Structures for Descent and   September 23-28, 2002
Galois Theory and Hopf Algebras, The Fields Institute, Toronto

Contributed Talk: *Pure-braided Hopf Algebra and Knot Invariants*

- Rings, Modules and Representations, Constanta, Romania   August 14-18, 2000

Contributed Talk: *Pseudo-quasitriangular Subbialgebras*

2. Seminar/Colloquium Talks

- BGSU, Algebra and Topology seminar — January 31 2018
- University of Toledo, Algebra seminar — December 4 2017
- Ohio Northern University, Colloquium talk — November 2015
- BGSU, Algebra and Topology seminar — February 2015
- BGSU, Algebra and Topology seminar — October 2014
- BGSU, Algebra and Topology seminar — January 2014
- BGSU, Algebra and Topology seminar — September and November 2013
- University of Iowa, Colloquium talk — May 2013
- University of Toledo, Colloquium talk — March 2013
- BGSU, Algebra and Topology seminar — February and March 2013
- BGSU, Algebra and Topology seminar — October 2012
- BGSU, Algebra and Topology seminar — February and March 2012
- BGSU, Algebra and Topology seminar — September and October 2011
- BGSU, Colloquium talk — April 2011
- North Dakota State, Colloquium talk — January 2011
- DePaul University, Algebra seminar — October 2010
- Albany University, Colloquium talk — February 2010
- Chicago University, Topology seminar — February 2010
- Indiana University, Topology seminar — October 2008 and 2009
- Ohio State University, Topology seminar — May 2006
- University of Rochester, Topology seminar — March 2006
- SUNY at Buffalo, Algebra Seminar — Fall 2004 and 2005

- SUNY at Buffalo, Topology Seminar   September 2002

- Institute of Mathematics of the Romanian Academy, Algebra Seminar   Fall 2000

- University of Antwerp, Visitors Seminar   October 1999

- University of Bucharest, Noncommutative Algebra Seminar   Spring 1999

- Institute of Mathematics of the Romanian Academy, Topology Seminar Spring 1998, 1999 and 2000

VII. TEACHING EXPERIENCES

1. Undergraduate Courses

- **Bowling Green State University**, Department of Mathematics and Statistics, Assistant Professor 2011-2017, Associate Professor 2017-

College Algebra, Calculus-Analytic Geometry I, Calculus & Analytic Geometry II, Linear Algebra, Fundamental Concepts of Modern Algebra, Modern Geometry, Modern Algebra I and II, Number Theory.

- **DePaul University**, Department of Mathematics, Visiting Assistant Professor 2010-2011

Calculus for Business, Basic Applied Algebra, Calculus III, Introduction to Discrete Mathematics.

- **Indiana University**, Department of Mathematics, Zorn Postdoctoral Fellow 2007-2010

Calculus I,II & III, Differential Equation I & II, Brief Survey of Calculus.

- **SUNY at Buffalo**, Department of Mathematics, Instructor and Teaching Assistant 2001-2007

Mathematical Analysis for Management, Calculus I & III, Linear Algebra.

- **University of Bucharest**, Department of Mathematics, Teaching Assistant   1997-2000

Linear Algebra, Abstract Algebra.

2. **Graduate Courses**

- **Bowling Green State University**, Department of Mathematics and Statistics, Assistant Professor 2011-2017, Associate Professor 2017-

Abstract Algebra I and II, Differential Geometry, Topics in Algebra (Introduction to K-theory), Topics in Algebra (Introduction to Commutative Algebra with application to Algebraic Geometry), Topics in Algebra (Introduction to Quantum Groups), Introduction to Knot Theory, Topology I and II, Introduction to Representation Theory

3. **Dissertation Students**

- **BGSU**, Department of Mathematics and Statistics,   2011-

Ph. D. Dissertation Committees

Chair of the Ph.D. Thesis Committee for Samuel Carolus   201?

Chair of the Ph.D. Thesis Committee for Paul Schrader   2018

Member in the Ph.D. Thesis Dissertation Committee for Mark Medwid   2017

Chair of the Ph.D. Thesis Dissertation Committee for Jacob Laubacher   2017

Member in the Ph.D. Thesis Dissertation Committee for Robert Kelvey   2016

Member in the Ph.D. Thesis Dissertation Committee for Nicholas Immormino   2012

Master Dissertation Committees

Member in the Master Thesis Dissertation Committee for Samuel Reed   2017

Member in the Master Thesis Committee for Erin McDougall   201?

Chair of the Master Thesis Dissertation Committee for Mark Medwid   2014

Member in the Master Thesis Dissertation Committee for Marilee Murray   2012

4. Teaching Awards

• **The Melva Behrns Award**, Department of Mathematics, SUNY at Buffalo   May 2005

Awarded yearly by the Department of Mathematics for excellence in teaching.

VIII. SERVICE

1. Departmental Service

(a) Graduate Committee 2015-

(b) Colloquium Committee 2015-2017

(c) Advisory Committee (elected) 2016-2017

(d) Personnel Committee (elected) 2015-2016

(e) Undergraduate Committee 2011-2015

(f) Admission Team (to Graduate Program) 2011-2014

(g) Member in the Library Committee. 2011-2012

(h) Designed and updated the webpage for the *Algebra and Topology Seminar* at BGSU, 2011–2017

2. Professional Service

(a) Co-organizer of the special session on *Cohomology, Deformations, and Quantum Groups* at the AMS meeting at SUNY at Buffalo, Buffalo September 16-17 2017

(b) Co-organizer of the special session on *Cohomology of Algebras and Deformation Theory* at the AMS meeting at Loyola University, Chicago   October 3-4 2015

    (c) Co-organizer of the *49-th Spring Topology and Dynamics Conference*, BGSU, Bowling Green OH   May 14-16 2015

    (d) Referee for *Communications in Algebra, Applied Mathematics-A Journal of Chinese Universities, Journal of Algebra, Bulletin of Belgian Math Soc, Algebras and Representation Theory, Israel Journal of Mathematics.*

3. University Service

    (a) Member in the *Graduate Council*, representing Department of Mathematics and Statistics.   Fall 2017-

    (b) Member in the *Undergraduate Council*, representing College of Arts and Sciences 2013-2016

    (c) Represented Department of Mathematics and Statistics at the BGSU *Preview Day*, 2012-2016.

    (d) Event supervisor for the *Science Olympiad*, BGSU   2016.

    (e) Judge for the *Graduate Student Senate Awards*, at BGSU.   April 2012, 2013.

    (f) Member in the *Fiscal Affairs Advisory Committee*, representing College of Arts and Sciences. Attended college/divisional presentations to UBC/FAAC.   Spring 2012

IX. HONORS AND AWARDS

- *The Gheorghe Ţiţeica Prize of the Romanian Academy of Sciences for Mathematics*

- *Dissertation Fellowship*, College of Arts and Sciences, SUNY at Buffalo   Fall 2006

- *Presidential Fellowship*, College of Arts and Sciences, SUNY at Buffalo   2001-2005

- *World Bank Fellowship*, University of Bucharest, Romania   Fall 1999

- *Tempus Scholarship*, University of Bucharest, Romania   March-June 1998