Christin Bibby

❖ CURRICULUM VITAE ❖

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❖ ACADEMIC EMPLOYMENT:

Louisiana State University, Baton Rouge   Aug. 2020 – Present
  Assistant Professor (tenure track)
University of Michigan, Ann Arbor   Sept. 2017 – May 2020
  Postdoctoral Assistant Professor
University of Western Ontario, London, Canada   July 2015 – June 2017
  Assistant Professor and Postdoctoral Fellow

❖ EDUCATION:

University of Oregon, Eugene
  Ph.D. in Mathematics. Advisor: Nick Proudfoot   June 2015
  M.S. in Mathematics   June 2011
Northern Arizona University, Flagstaff
  B.S. in Mathematics, extended major with minor in Chemistry   May 2009

❖ RESEARCH:

Research Interests

  Interactions between combinatorics, algebraic geometry, and topology; representation stability; hyperplane arrangements, configuration spaces, and their generalizations; matroids

Publications

[1] C. Bibby. Cohomology of abelian arrangements. *Proceedings of the American Mathematical Society* 144 (2016), pp. 3093–3104.
     MR 3487239. http://dx.doi.org/10.1090/proc/12937

[2] C. Bibby, J. Hilburn. Quadratic–linear duality and rational homotopy theory of chordal arrangements. *Algebraic and Geometric Topology* 16 (2016), pp. 2637–2661.
     MR 3572342. https://doi.org/10.2140/agt.2016.16.2637

[3] C. Bibby. Representation stability for the cohomology of arrangements associated to root systems. *Journal of Algebraic Combinatorics* 48 (2018), pp. 51–75.
     MR 3836246. https://doi.org/10.1007/s10801-017-0792-0

[4] C. Bibby, N. Gadish. Combinatorics of orbit configuration spaces, FPSAC extended abstract. *Séminaire Lotharingien de Combinatoire* 80B (2018), Article #72, 11 pp. MR3940647
     http://www.mat.univie.ac.at/~slc/wpapers/FPSAC2018/72-Bibby-Gadish.pdf

[5] C. Bibby, A. Odesky, M. Wang, S. Wang, Z. Zhang, and H. Zheng. Minimal flag triangulations of lower-dimensional manifolds. *Involve. A Journal of Mathematics.* 13 (2020), pp. 683–703.
     https://doi.org/10.2140/involve.2020.13.683

In press

[6] C. Bibby, N. Gadish. Combinatorics of orbit configuration spaces. *International Mathematics Research Notices* (2020), 45 pp, to appear. https://doi.org/10.1093/imrn/rnaa296

Preprints

[7] C. Bibby, G. Denham, E.M. Feichtner. A Leray model for the Orlik–Solomon algebra, 46 pp. Submitted. https://arxiv.org/abs/1910.10001

[8] C. Bibby, N. Gadish. A generating function approach to new representation stability phenomena in orbit configuration spaces, 43 pp. Submitted. https://arxiv.org/abs/1911.02125

❖ AWARDS AND GRANTS:

Research and conference grants

2022	Research in Pairs at Oberwolfach, Germany
2019	NSF DMS-1933786 "Hyperplane Arrangements and Singularities" conference grant, co-PI
2008	NAU–NASA Space Grant for undergraduate research

Travel grants

2018–21	AMS–Simons Travel Grant
2018	US Junior Oberwolfach Fellow
2017	AMS–NSF Travel Grant for the Mathematical Congress of the Americas
2014	Johnson Fellowship, Univ. of Oregon

Teaching awards

| 2019 | The Juha Heinonen Award, University of Michigan Department of Mathematics |
| 2019 | Honored Instructor, University of Michigan Housing |

❖ TEACHING:

Louisiana State University (2020–).

Calculus I, Math 1550

University of Michigan (2017–2020).

Calculus I, Math 115 ($\times 2$)
Linear Algebra, Math 217 ($\times 4$)
Intro to Combinatorics, Math 465 ($\times 6$)

University of Western Ontario (2015–2017).

Calculus I, Calc 1000A
Methods of Finite Math, Math 1228B
Linear Algebra I, Math 1600A
Discrete Structures for Engineering, Math 2151A

University of Oregon (2009–2015).

College Algebra, Math 111 ($\times 7$)
Elementary Functions, Math 112

Calculus for Business and Social Science II, Math 242

Intro to Probability and Statistics, Math 243

Calculus I, Math 251 ($\times 4$)

Calculus II, Math 252 ($\times 2$)

Elementary Analysis, Math 315

Mentoring

2019	Project mentor in Research Experience for Undergraduates program at Univ. of Michigan.
2019	Co-mentor for undergraduate research project through the Lab of Geometry at Michigan.
2015	Mentored an undergraduate student in a reading on algebraic geometry.
2014-15	Helped organize an undergraduate reading program and panels on summer programs and careers in mathematics, with the UO AWM Undergraduate Mentoring Committee.
2012-15	Mentor for first-year graduate students at UO (two students per year).

❖ SERVICE:

To the community

2015	Co-lead activity on probability and Buffon's needle at a math program for girls, organized with the UO AWM Chapter's K-12 Outreach Committee and the Science Factory.
2015	Grader for Oregon Invitational Mathematics Tournament at UO.
2014	Co-lead activity on cryptography at a math program for girls, organized with the UO AWM Chapter's K-12 Outreach Committee and the Science Factory.
2012	Proctor for Oregon Invitational Mathematics Tournament at UO.

To the university

2020–	LSU College of Science Diversity Committee

To the profession

2018–	Referee and expert opinion for 12 mathematical journals, including both general mathematical journals and those focused on topology, algebra, or combinatorics.
2018–	Contributor to *Mathematical Reviews* (MathSciNet), 7 reviews completed.
2018	*Oberwolfach Reports* reporter for workshop on Topology of Arrangements and Representation Stability.

❖ CONFERENCES AND WORKSHOPS:

Meetings co-organized

2021	Arrangements in Fribourg summer school in Fribourg, Switzerland.
2020	Arrangements at Home, a series of virtual workshops on Zoom.
2019	Arrangements at Western workshop and research period in London, Canada.
2017	Advances in Arrangement Theory Special Session at the Mathematical Congress of the Americas in Montréal, Canada.

Invited lecture series

2019   Toric Arrangements, 7 lectures at CIMPA Research School on Hyperplane Arrangements (Hanoi, Vietnam).

Invited conference talks

2019   Hyper–JARCS: Hyperplane Arrangements and the Japanese–Australian Real and Complex Singularities conference (Tokyo, Japan).

AlGeCom: Algebra, Geometry, and Combinatorics Day (Washington University in St. Louis, MO).

Arrangements at Western (London, ON, Canada).

Midwest Representation Stability Research Meeting (Chicago, IL).

2018   Special session on combinatorics in algebra and algebraic geometry, AMS Fall Central Section Meeting (University of Michigan, Ann Arbor).

Matroids, reflection groups, and free hyperplane arrangements (RIMS, Kyoto, Japan).

Special session on topics in toric geometry, AMS Spring Eastern Section Meeting.

Special session on arrangements of hypersurfaces, AMS Spring Eastern Section Meeting (Northeastern University, Boston, MA).

2017   Arrangements and beyond: combinatorics, geometry, topology and applications in honor of Mario Salvetti (Centro di Giorgi in Pisa, Italy).

Encounter in Topology 'n Algebra (Scuola Superiore di Catania, Italy).

Special session on representation stability and its applications, AMS Spring Central Section Meeting (Indiana University, Bloomington).

2016   Session on equivariant geometry and topology, CMS Winter Meeting (Niagara, Canada).

Special session on topology and combinatorics of arrangements (in honor of Mike Falk), AMS Spring Eastern Section Meeting (SUNY Stony Brook).

Special session on algebraic and topological methods in combinatorics, JMM (Seattle, WA).

2015   Combinatorial Constructions in Topology (University of Regina, Saskatchewan, Canada).

Computational Geometric Topology in Arrangement Theory (ICERM in Providence, RI).

Workshop on Combinatorics and Algebraic Topology of Configurations in the INdAM Intensive Period "Perspectives in Lie Theory" (Centro di Giorgi in Pisa, Italy).

Contributed talks

2018   FPSAC: Formal Power Series and Algebraic Combinatorics (Dartmouth College, NH).

2017   Joint Mathematics Meetings (Atlanta, GA).

2015   Joint Mathematics Meetings (San Antonio, TX).

2009   NASA Space Grant Symposium (Tempe, AZ).

MAA Southwest Section Meeting (Silver City, NM).

2007-09   Southwest Undergraduate Math Research Conference (AZ, NM).

Poster presentations

2016   Introductory Workshop on Combinatorial Algebraic Geometry (Fields Institute, Canada).

2014   Configuration Spaces: Geometry, Topology, and Representation Theory (Cortona, Italy).

2013   Western Algebraic Geometry Symposium (San Diego, CA).

2009   Celebration for Undergraduate Research and Design (Flagstaff, AZ).

Joint Mathematics Meetings (Washington, DC).

Selected workshops

2021	Oberwolfach Workshop Logarithmic Vector Fields and Freeness of Divisors and Arrangements: New perspectives and applications (Germany, online).
2020	AIM Workshop Configuration Spaces of Graphs (AIM, San Jose, CA).
2018	Oberwolfach Workshop Topology of Arrangements and Representation Stability (Germany).
2015	Oberwolfach Seminar Topological Combinatorics of Configuration Spaces (Germany).

Seminars and colloquia

2021	Topology seminar, Northeastern University (Zoom).
2020	Geometry and Combinatorics seminar, University of Western Ontario (Zoom).
	Algebra Seminar, Illinois State University (Zoom).
	Colloquium, Louisiana State University (Baton Rouge, LA).
2019	Representation Stability seminar, University of Michigan (Ann Arbor, MI).
	REU seminar, Grand Valley State University (Allendale, MI).
	Geometry and Topology seminar, University of Chicago (Chicago, IL).
	Topology seminar, Purdue University (Lafayette, IN).
2018	Algebra seminar, University of Kentucky (Lexington, KY).
	Geometry and Topology seminar, University of California, Irvine (Irvine, CA).
	Geometry and Topology seminar, University of Chicago (Chicago, IL).
	Representation Stability seminar, University of Michigan (Ann Arbor, MI).
2017	Algebraic Geometry seminar, The Ohio State University (Columbus, OH).
	Combinatorics seminar, University of Michigan (Ann Arbor, MI).
	Geometry and Topology seminar, University of Chicago (Chicago, IL).
	Geometry and Topology seminar, University of Western Ontario (London, Canada).
2016	Algebraic Combinatorics seminar, University of Waterloo (Waterloo, Canada).
	Geometry and Topology seminar, McMaster University (Hamilton, Canada).
	Algebra seminar, University of Western Ontario (London, Canada).
2015	Geometry and Topology seminar, University of Western Ontario (London, Canada).
2014	Geometry and Topology seminar, University of Oregon (Eugene, OR).
2013	Geometry and Topology seminar, University of Oregon (Eugene, OR).