

APPOINTMENTS

Louisiana State University

Associate Professor
Assistant Professor

Aug. 2026–Present
Aug. 2020–Aug. 2026

University of Michigan

Postdoctoral Assistant Professor

Sept. 2017–May 2020

University of Western Ontario (Western University)

Assistant Professor and Postdoctoral Fellow

July 2015–June 2017

EDUCATION

University of Oregon

Ph.D. in Mathematics
adviser: Nick Proudfoot
M.S. in Mathematics

June 2015
June 2011

Northern Arizona University

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

Journal 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, A. Odesky, M. Wang, S. Wang, Z. Zhang, H. Zheng. Minimal flag triangulations of lower-dimensional manifolds. *Involve* 13 (2020), pp. 683-703.
MR 4190432. <https://doi.org/10.2140/involve.2020.13.683>

- [5] C. Bibby, N. Gadish. Combinatorics of orbit configuration spaces. *International Mathematics Research Notices* 2022:9 (2022), pp. 6903-6947.
MR 4411471. <https://doi.org/10.1093/imrn/rnaa296>
- [6] C. Bibby, G. Denham, E. M. Feichtner. A Leray model for the Orlik-Solomon algebra. *International Mathematics Research Notices* 2022:24 (2022), pp. 19105-19174.
MR 4523245. <https://doi.org/10.1093/imrn/rnab131>
- [7] C. Bibby, N. Gadish. A generating function approach to new representation stability phenomena in orbit configuration spaces. *Transactions of the American Mathematical Society, Series B* 10 (2023), pp. 241-287.
MR 4546785. <https://doi.org/10.1090/btran/130>
- [8] C. Bibby, M. Chan, N. Gadish, C. H. Yun. Homology representations of compactified configurations on graphs applied to $\mathcal{M}_{2,n}$. *Experimental Mathematics* 33:4 (2024), pp. 611-623.
MR 4830678. <https://doi.org/10.1080/10586458.2023.2209749>
- [9] C. Bibby, E. Delucchi. Supersolvable posets and fiber-type abelian arrangements. *Selecta Mathematica. New Series* 30:5 (2024), Paper No. 89, 39 pp.
MR 4808965. <https://doi.org/10.1007/s00029-024-00976-w>
- [10] C. Bibby, M. Chan, N. Gadish, C. H. Yun. A Serre spectral sequence for the moduli space of tropical curves, 30 pp., *Journal of Combinatorial Algebra* (2026), accepted.
<https://doi.org/10.4171/jca/121>
- [11] C. Bibby, D. C. Cohen, E. Delucchi. Monodromy of supersolvable toric arrangements, 30 pp., *Forum of Mathematics, Sigma* (2026), accepted.
<https://arxiv.org/abs/2510.00166>

Extended Abstracts

- [12] C. Bibby, N. Gadish. Combinatorics of orbit configuration spaces, FPSAC extended abstract. *Séminaire Lotharingien de Combinatoire* 80B (2018), Article #72, 11 pp. MR 3940647.
<https://www.mat.univie.ac.at/~slc/wpapers/FPSAC2018/72-Bibby-Gadish.pdf>
- [13] C. Bibby, N. Gadish. A generating function approach to new representation stability phenomena in orbit configuration spaces. In “Logarithmic Vector Fields and Freeness of Divisors and Arrangements: New perspectives and applications” Oberwolfach Rep. 18 (2021).
<https://doi.org/10.4171/OWR/2021/5>
- [14] C. Bibby, E. Delucchi. Supersolvable posets and fiber-type arrangements, FPSAC extended abstract. *Séminaire Lotharingien de Combinatoire* 91B (2024), Article #36, 12 pp.
MR 4818668. <https://www.mat.univie.ac.at/~slc/wpapers/FPSAC2024/36.pdf>
- [15] C. Bibby, P. Ramsey. The Orlik—Solomon algebra of a locally geometric poset, FPSAC extended abstract. *Séminaire Lotharingien de Combinatoire*, to appear.
<https://www.mat.univie.ac.at/~slc/wpapers/FPSAC2026/48.pdf>

Preprints

- [16] C. Bibby. Matroid schemes and geometric posets, 22 pp.
<https://arxiv.org/abs/2203.15094>
- [17] G. Agraphari, C. Bibby, S. Boros, H. Garcia, F. Heidercheit, Z. Wang. On some structural properties of graphs with non-negative resistance curvature, 15 pp.
<https://arxiv.org/abs/2607.13169>
- [18] C. Bibby, P. Ramsey. The Orlik—Solomon algebra of a locally geometric poset and cohomology of complex abelian arrangements, 27 pp.
<https://arxiv.org/abs/2608.23384>

Author Pages

ORCID: <https://orcid.org/0000-0003-3840-6199>
MathSciNet: <http://www.ams.org/mathscinet/MRAuthorID/1157407>
zbMATH: <https://zbmath.org/authors/?q=ai%3Abibby.christin>
Google Scholar: <https://scholar.google.com/citations?user=YvJfBoEAAAAAJ&hl=en>
arXiv: <https://arxiv.org/search/?searchtype=author&query=Bibby%2C+C>

Research Visits

2022 Collaborate@ICERM (Providence, RI), one week
2022 Oberwolfach research-in-pairs (Germany), two weeks
2021 ICERM thematic program on Combinatorial Algebraic Geometry (virtual), spring term
2019 Arrangements at Western intensive research period (London, Canada), two weeks
2017 Institute for Algebra, Geometry, Topology, and their Applications at Universität Bremen (Germany), two weeks

AWARDS AND GRANTS

Research grants

2026-31 Simons Foundation International MPS-TSM-00026153 “Combinatorics and topology of arrangements” PI (\$42,000)
2023-28 NSF DMS-2231492 “RTG: Topology, Representation Theory, and Mathematical Physics at Louisiana State University” Senior Personnel (\$2,496,082)
2022-27 NSF DMS-2204299 “Topology and combinatorics of arrangements” PI (\$186,130)
2008-09 NAU-NASA Space Grant for undergraduate research

Teaching awards

2026 Graduate Teaching Award, LSU College of Science
2019 The Juha Heinonen Award, University of Michigan Department of Mathematics
2019 Honored Instructor, University of Michigan Housing

Conference grants

2025-26 NSF DMS-2533479 “Conference: Topology of Arrangements with an Eye to Applications” PI (\$33,488)
2019-21 NSF DMS-1933786 Conference Grant Co-PI (\$24,000)

Travel grants

2018 AMS-Simons Travel Award
2018 US Junior Oberwolfach Fellow
2017 AMS-NSF Travel Grant for the Mathematical Congress of the Americas
2014 Johnson Fellowship, University of Oregon

TEACHING

Louisiana State University (2020–)

Undergraduate Courses

Calculus I, Math 1550 (lecture)
Linear Algebra, Math 2085 (lecture)

Elementary Differential Equations and Linear Algebra, Math 2090 (lecture)

Mixed Undergraduate/Graduate

Vertically Integrated Research, Math 4997 (communication-intensive)

Graduate Courses

Combinatorial Theory, Math 7400 (inquiry-based learning)

Topology I, Math 7510 (lecture)

Arrangements and Configuration Spaces, Math 7590 (seminar)

Combinatorial Algebraic Topology, Math 7590 (seminar)

Rational Homotopy Theory, Math 7590 (seminar)

University of Michigan (2017–2020)

Calculus I, Math 115 (active learning)

Linear Algebra, Math 217 (inquiry-based learning)

Intro to Combinatorics, Math 465 (lecture)

Western University (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

Elementary Functions, Math 112

Calculus for Business and Social Science II, Math 242

Intro to Probability and Statistics, Math 243

Calculus I, Math 251

Calculus II, Math 252

Elementary Analysis, Math 315

Workshops and professional development

2025 Communication-Intensive (C-I) Teaching Lab, LSU (Baton Rouge, LA)

2018 Inquiry-Based Learning (IBL) Workshop, University of Michigan (Ann Arbor, MI)

2018 Learning Community on Inclusive Teaching, University of Michigan (Ann Arbor, MI)

2016 Teaching Squares Program, University of Western Ontario (London, Canada)

ADVISING AND MENTORING

Postdoc Mentor

Kyle Binder (from Fall 2025)

PhD Advisor

Hailey Garcia (PhD expected 2030)

Emmanuel Asante (PhD expected 2028)

Peter Ramsey (PhD expected 2027)

SERVICE

Outreach

- 2023 Panel member discussing the LSU Math RTG at the College of Science's "Science and Spirits" event
- 2022 Chat Leader for Girls Day at the Museum, program for girls in 4th-6th grades organized through LSU College of Science
- 2021 Contributed to the "When did you know you wanted to be a scientist?" article in an edition of the LSU College of Science Pursuit for Kids newspaper
- 2021 Chat Leader for Girls Day at the Museum, program for girls in 4th-6th grades organized through LSU College of Science
- 2015 Helped organize an undergraduate reading program and panels on summer programs and careers in mathematics, with the UO AWM
- 2015 Co-lead activity at math program for girls organized with UO AWM and the Science Factory
- 2015 Grader for Oregon Invitational Mathematics Tournament at Univ Oregon
- 2014 Helped organize an undergraduate reading program and panels on summer programs and careers in mathematics, with the UO AWM
- 2014 Co-lead activity at math program for girls organized with UO AWM and the Science Factory
- 2012 Proctor for Oregon Invitational Mathematics Tournament at Univ Oregon

University, College, and Department Service

- 2026- Undergraduate awards committee member, LSU Department of Mathematics
- 2023- Association for Women in Mathematics, faculty advisor for LSU student chapter
- 2025-26 Postdoc hiring committee member, LSU Department of Mathematics
- 2023-25 Recruiting students at the Gulf States Math Alliance Conference
- 2023-24 Mentor for graduate teaching assistants, LSU Department of Mathematics
- 2021-23 Hiring committee member, LSU Department of Mathematics
- 2020-24 Diversity committee member, LSU College of Science
- 2013-15 Secretary of Univ. of Oregon's Student Chapter of the Association for Women in Math

Professional Service

- 2025 Reviewer on 2 NSF review panels
- 2018- Referee and expert opinion for journals in general mathematics, topology, algebra, and combinatorics
- 2018- Contributor to Mathematical Reviews
- 2018 Oberwolfach Reports reporter for workshop on Topology of Arrangements and Representation Stability
- 2017- Organizer for various meetings at the regional, national, and international levels

CONFERENCES, WORKSHOPS, AND SEMINARS

Meetings co-organized

- 2025- LSU Geometry & Topology Seminar, hybrid weekly seminar Baton Rouge, LA
- 2024- Combinatorics and Geometry BLT Seminar, monthly seminar virtual
- 2029 SLMath (MSRI) Semester Program on Geometry and Combinatorics of Artin Groups and Arrangements Berkeley, CA

2025	Special Session on Hyperplane Arrangements and Polytopes at the AMS Southeastern Sectional Meeting	<i>Tulane U, New Orleans, LA</i>
2025	Topology of arrangements with an eye to applications	<i>University of Pisa, Italy</i>
2024	Special Session on Algebraic Combinatorics and Matroids at the Joint Meeting of the NZMS, AustMS, and AMS	<i>Auckland, New Zealand</i>
2024	Mini-symposium on polytopes and hyperplane arrangements at the TX-LA SIAM meeting	<i>Baylor U, Waco, TX</i>
2024	MSRI Hot Topics Workshop on Artin groups and arrangements: topology, geometry, and combinatorics	<i>Berkeley, CA</i>
2024	Modern developments in configuration spaces special session at the Joint Mathematics Meetings	<i>San Francisco, CA</i>
2022	Arrangements in Ticino	<i>Locarno and Lugano, Switzerland</i>
2021	Arrangements at Home IV	<i>virtual</i>
2020	Arrangements at Home I-III	<i>virtual</i>
2019	Arrangements at Western workshop and research period	<i>London, Canada</i>
2017	Advances in Arrangement Theory special session at the Mathematical Congress of the Americas	<i>Montréal, Canada</i>

Invited lecture series

2019	Toric Arrangements, 7 lectures at CIMPA Research School on Hyperplane Arrangements	<i>Hanoi, Vietnam</i>
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Invited conference talks

2027	Arrangements and Beyond in Bologna	<i>U Bologna, Italy</i>
2026	Arrangements in Oregon: Yuzvinsky 90	<i>U Oregon, Eugene, OR</i>
2026	AlGeCom XXVII: Algebra, Geometry, and Combinatorics Day	<i>Purdue U, IN</i>
2026	Applied Topology Semi-Plenary, 59th Spring Topology and Dynamics Conference	<i>U Alabama Birmingham, AL</i>
2024	Session on computations & applications of algebraic geometry and commutative algebra, AMS-AustMS-NZMS Joint Meeting	<i>Auckland, NZ</i>
2024	Session on singularities, AMS-AustMS-NZMS Joint Meeting	<i>Auckland, NZ</i>
2024	Workshop on Polyhedral Products, Fields Institute	<i>Toronto, ON, Canada</i>
2024	Suzhou Workshop on Matroid Theory	<i>Soochow University, Suzhou, China</i>
2024	Mid-Atlantic Topology Conference	<i>Northeastern U, Boston, MA</i>
2024	Lloyd Roeling Conference	<i>U Louisiana, Lafayette, LA</i>
2024	Modern developments in the theory of configuration spaces, Joint Mathematics Meetings	<i>San Francisco, CA</i>
2023	Conference on Hyperplane Arrangements	<i>Tokyo, Japan</i>
2023	Combinatorial algebraic geometry and rigidity theory mini-symposium at the SIAM Texas-Louisiana Sectional Meeting	<i>Lafayette, LA</i>
2023	South Central Topology Conference	<i>New Mexico State U, Las Cruces</i>
2023	Stability in topology, arithmetic, and representation theory	<i>Purdue U, IN</i>
2022	Stability in topology, arithmetic, and representation theory	<i>Purdue U, IN, hybrid</i>
2021	Algebraic combinatorics in the southeast special session, AMS Fall Southeastern Section Meeting	<i>virtual</i>
2021	Oberwolfach Workshop Logarithmic Vector Fields & Freeness of Divisors & Arrangements: New perspectives and applications	<i>Germany, virtual</i>

- 2019 Hyper-JARCS: Hyperplane Arrangements and the Japanese-Australian Real and Complex Singularities conference *Tokyo, Japan*
- 2019 AlGeCom XVIII: Algebra, Geometry, and Combinatorics Day *Washington U, St. Louis, MO*
- 2019 Arrangements at Western *London, Canada*
- 2019 Midwest Representation Stability Meeting *Chicago, IL*
- 2018 Combinatorics in algebra and algebraic geometry special session at the AMS Fall Central Section Meeting *U Michigan, Ann Arbor*
- 2018 Matroids, reflection groups, and free hyperplane arrangements *RIMS, Kyoto, Japan*
- 2018 Topics in toric geometry special session, AMS Spring Eastern Section Meeting *Northeastern U, Boston*
- 2018 Arrangements of hypersurfaces, AMS Spring Eastern Section Meeting *Northeastern U, Boston*
- 2017 Arrangements and beyond: combinatorics, geometry, topology, and applications in honor of Mario Salvetti *Centro di Giorgi, Pisa, Italy*
- 2017 Encounter in Topology ‘n Algebra *Scuola Superiore di Catania, Italy*
- 2017 Representation stability and its applications special session, AMS Spring Central Section Meeting *Indiana U, Bloomington*
- 2016 Equivariant geometry and topology session, CMS Winter Meeting *Niagara, Canada*
- 2016 Topology and combinatorics of arrangements (in honor of Mike Falk) special session, AMS Spring Eastern Section Meeting *SUNY Stony Brook*
- 2016 Algebraic and topological methods in combinatorics special session, JMM *Seattle, WA*
- 2015 Combinatorial Constructions in Topology *U Regina, Canada*
- 2015 Computational Geometric Topology in Arrangement Theory *ICERM, Providence, RI*
- 2015 Workshop on Combinatorics and Algebraic Topology of Configurations during the INdAM Intensive Period “Perspectives in Lie Theory” *Centro di Giorgi, Pisa, Italy*

Contributed talks

- 2024 FPSAC: Formal Power Series and Algebraic Combinatorics *Bochum, Germany*
- 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*
- 2009 MAA Southwest Section Meeting *Silver City, NM*
- 07-09 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*
- 2009 Joint Mathematics Meetings *Washington, DC*

Selected workshops

- 2024 Oberwolfach Workshop Arrangements, Matroids, & Logarithmic Vector Fields *Germany*
- 2022 BIRS-CMO Workshop Topological Complexity and Motion Planning *Oaxaca, Mexico*
- 2021 Oberwolfach Workshop Logarithmic Vector Fields & Freeness of Divisors & Arrangements: New perspectives and applications *Germany, virtual*
- 2020 AIM Workshop Configuration Spaces of Graphs *San Jose, CA*

2018	Oberwolfach Workshop Topology of Arrangements & Representation Stability	Germany
2015	Oberwolfach Seminar Topological Combinatorics of Configuration Spaces	Germany

Seminars and colloquia

2026	Algebra and Combinatorics Seminar, Texas A&M University	College Station, TX
2024	Algebra Seminar, Florida State University	Tallahassee, FL
2023	Matroids Seminar, Fields Institute	virtual
2022	RATCOW Seminar, University of Oregon	Eugene, OR
2022	Algebraic Topology Seminar, UNAM, Mexico	virtual
2022	Combinatorics Seminar, Brown University	virtual
2022	Combinatorics Seminar, Cornell University	virtual
2022	Algebra and Geometry Seminar, Goethe Universität Frankfurt, Germany	virtual
2021	Topological Complexity Seminar, Applied Algebraic Topology Research Network	virtual
2021	Geometry and Topology Seminar, Louisiana State University	Baton Rouge, LA
2021	Discrete Mathematics Seminar, Simon Fraser University, Canada	virtual
2021	Topology Seminar, Northeastern University	virtual
2021	Algebraic Topology Seminar, Université de Strasbourg, France	virtual
2020	Geometry and Combinatorics Seminar, Western University, Canada	virtual
2020	Algebra Seminar, Illinois State University	virtual
2020	Colloquium, Louisiana State University	Baton Rouge, LA
2019	Representation Stability Seminar, University of Michigan	Ann Arbor, MI
2019	REU Seminar, Grand Valley State University	Allendale, MI
2019	Geometry and Topology Seminar, University of Chicago	Chicago, IL
2019	Topology Seminar, Purdue University	Lafayette, IN
2018	Algebra Seminar, University of Kentucky	Lexington, KY
2018	Geometry and Topology Seminar, University of California, Irvine	Irvine, CA
2018	Geometry and Topology Seminar, University of Chicago	Chicago, IL
2018	Representation Stability Seminar, University of Michigan	Ann Arbor, MI
2017	Algebraic Geometry Seminar, The Ohio State University	Columbus, OH
2017	Combinatorics Seminar, University of Michigan	Ann Arbor, MI
2017	Geometry and Topology Seminar, University of Chicago	Chicago, IL
2017	Geometry and Topology Seminar, Western University	London, Canada
2016	Algebraic Combinatorics Seminar, University of Waterloo	Waterloo, Canada
2016	Geometry and Topology Seminar, McMaster University	Hamilton, Canada
2016	Algebra Seminar, Western University	London, Canada
2015	Geometry and Topology Seminar, Western University	London, Canada
2014	Geometry and Topology Seminar, University of Oregon	Eugene, OR
2013	Geometry and Topology Seminar, University of Oregon	Eugene, OR