SCOTT ALLEN TAYLOR

PROFESSOR, COLBY COLLEGE
CURRICULUM VITAE: SEPTEMBER 20, 2023.

CONTACT
INFORMATION

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http://www.colby.edu/~sataylor

COLBY COLLEGE EMPLOYMENT

Dept. Chair	2020 – 2023.	Assistant Professor	2010 – 2015.
Professor	2022 – present.	Faculty Fellow	2009 – 2010.
Associate Professor	2015 – 2022.	Visiting Assistant Professor	2008 – 2009.

EDUCATION

Ph.D. (Mathematics)
2008

University of California, Santa Barbara. Santa Barbara, California.
Dissertation: *Boring split links and unknots*
Committee: Martin Scharlemann (chair), Daryl Cooper, Jon McCammond

M.A. (Mathematics)
2000

The Pennsylvania State University. State College, Pennsylvania.
Advisor: Edward Formanek

B.S. (Mathematics)
1998

Gordon College. Wenham, Massachusetts.
Summa Cum Laude

RESEARCH AREA

Geometric Topology, 3-Manifolds, Knots, Spatial Graphs

FUNDED GRANTS

Research Grants:

National Science Foundation Collaborative Research Grant "Connecting spatial graphs to links and 3-manifolds"
with Maggy Tomova (U. Iowa/U. Central Florida). June 2021 — June 2023.

American Institute of Mathematics SQuaREs Grant "Unknotting Spatial Graphs".
with Kenneth L. Baker (U. Miami), Dorothy Buck (Duke), Allison H. Moore (VCU),
and Danielle O'Donnol (Marymount). 2019 — present.

American Institute of Mathematics SQuaREs Grant "Applications of Thin Position to Uniqueness Problems".
with Ryan Blair (U. Penn.), Marion Moore Campisi (U. Texas Austin), Jesse Johnson (U. Oklahoma),
and Maggy Tomova (U. Iowa). December 2010 – October, 2014.

CBB-Mellon Grant for "Crossing Boundaries: Fostering Communication and Collaboration Among Algebraists,
Number Theorists, and Topologists". January, 2011 – June, 2012.
with Thomas Pietraho (Bowdoin), Jennifer Taback (Bowdoin), and Peter Wong (Bates)

Travel Grant from American Mathematical Society (Mathematical Research Communities), March 2012.

Colby College Natural Sciences Division Research Grant 2010 – 2011, 2012 – 2013, 2016 – 2022

Outreach & Teaching Grants:

2019-2020 Davis Family Foundation. "SUM Camp: Numeracy through the Arts." $41,220

2016-2018 "Colby Community Math Mentorship Program" (PI),
Tensor Foundation and the Goldfarb Center. $5136

Writing Intensive Course Development Grant from the Colby Writing Program, Fall 2015.

BOOK

Introduction to Mathematics: Numbers, Space, and Structure. American Mathematical Society, 2023.
A textbook for "Intro-to-proofs" courses that emphasizes communication, deep mathematical ideas, and connections to other subjects in the arts and sciences.

RESEARCH PAPERS (PUBLISHED, ACCEPTED & SUBMITTED)
(undergraduate co-authors in bold/preprints available on arXiv/all journals peer-reviewed)

23. *Primality of theta-curves with proper rational unknotting number one* (with Baker, Buck, O'Donnol, Moore) Submitted. arXiv: 2201.08213

22. *Bounding the Kirby-Thompson invariant of spun knots* (with Aranda, Pongtanapaisan, **Zhang**) Accepted by *Algebraic & Geometric Topology*

21. *Equivariant Heegaard genus of reducible 3-manifolds.* Math. Proc. Camb. Phil. Soc., Feb. 13, 2023

20. *Links, bridge number, and width trees* (with **He**) J. Math. Soc. Japan 75(1): 73-111 (January, 2023).

19. *Kirby-Thompson distance for trisections of knotted surfaces* (with Blair, Campisi, Tomova) J. LMS. (105) 2022, no. 2.

18. *Tunnel number and bridge number of composite genus 2 spatial graphs* (with Tomova) Pacific J. Mathematics (314) 2021, no. 2.

17. *Distortion and the bridge distance of knots* (with Blair, Campisi, Tomova). Journal of Topology (13) 2020, no. 2.

16. *Combinatorial minimal surfaces in pseudomanifolds* (with **Huang**, **Medici**, **Murphy**, **Song**, **Zhang**). Tokyo Journal of Mathematics. Online July 20, 2020.

15. *Dehn filling and the Thurston norm* (with Baker). Journal of Differential Geometry 112 (2019) no. 3, pp. 391–409.

14. *Additive invariants for knots, links and graphs in 3-manifolds* (with Tomova) Geometry & Topology, (22) 2018, 3235–3286.

13. *Thin position for knots, links, and graphs in 3-manifolds* (with Tomova). Algebraic & Geometric Topology, (18) 2018, 1361–1409.

12. *Neighbors of knots in the Gordian graph* (with Blair, Campisi, Johnson, Tomova). Amer. Math. Monthly, (124) 2017, no. 1, 4 − 23.

11. *Exceptional and cosmetic surgeries on knots* (with Blair, Campisi, Johnson, Tomova). Mathematische Annalen, (367) 2017, no. 1–2, 581–622.

10. *Distance 2 links* (with Blair, Campisi, Johnson, Tomova). Geometriae Dedicata, (180) 2016, 17–37.

9. *New examples of Brunnian theta graphs* (with **Jang**, **Kronaeur**, **Luitel**, **Medici**, Zupan). Involve, (9) 2016, no. 5, 857–875.

8. *Bridge spectra of twisted torus knots* (with Bowman and Zupan). International Mathematics Research Notices, 2015, no. 16, 7336–7356.

7. *Exceptional surgeries on knots with exceptional classes* Boletín de la Sociedad Matemática Mexicana, (20) 2014, no. 2, 335 − 362.

6. *Comparing 2-handle additions to a genus 2 boundary component.* Trans. Amer. Math. Soc., (366) 2014, no. 7, 3747–3769.

5. *Band-taut sutured manifolds.* Algebraic & Geometric Topology, (14) 2014, 157 − 215.

4. *c-Essential surfaces in (3-manifold, graph) pairs* (with Tomova). Comm. Anal. Geom., 21 (2013), no. 2, 295–330.

3. *Heegaard splittings for certain graphs in compressionbodies* (with Tomova). Revista Matemática Complutense, (25) 2012, No. 2, 511 − 555.

2. *Boring split links.* Pacific Journal of Mathematics, (241) 2009, No. 1, 127 − 167.

1. *On non-compact Heegaard splittings.* Algebraic & Geometric Topology, (7) 2007, 603 − 672.

EXPOSITORY WRITING/INTERDISCIPLINARY & EDUCATIONAL ACTIVITIES (student co-authors in bold)

10. Guest on "CampWire" podcast, Episode 63. Discussed Sum Camp. August 2023.

9. *Putting Sums back into Summer* AMS Blog on Teaching and Learning, January 31, 2022.

8. Panellist at *Pedagogy Matters* Conference, Bates College, August 2019.

7. *Abstractly planar spatial graphs.* Invited, peer-reviewed article for "A Concise Encyclopedia of Knot Theory," Edited by Adams, Flapan, Henrich, Ludwig, Kauffman, Nelson. December 2020.

6. *Two new proofs the Kinoshita graph is knotted* (with Ozawa). American Mathematical Monthly 126 (4) 2019, 352 – 357.

5. Math consultant for *The Jeanne Dixon Effect* (podcast/play) by Joe Rodata, Summer 2017. Available on Apple Podcasts and Audible.

4. *Knots in Blue.* Math Horizons (20) 2012 No. 1, 13 – 17.

3. *The three stooges of vector calculus* (with **Buskin** and **Prosapio**). Unpublished. arXiv, 2013.

2. *Reading Flatland.* Contributed Paper. San José. August 6, 2007. MathFest, 2007.

1. *Mathematics and the Love of God: An Introduction to the Thought of Simone Weil* Fourteenth Conference of the Association of Christians in the Mathematical Sciences, 2004. Published in the conference proceedings. Republished in inaugural issue of *The Journal of the ACMS*, 2004.

COURSES (Instructor of Record unless otherwise noted)

Colby College Mathematics as a Liberal Art, Mathematics Seminar, Single Variable Calculus, Single Variable Calculus Revisited, Series and Multivariable Calculus, Vector Calculus, Linear Algebra, Mathematical Reasoning, Topology, Geometry of Surfaces, Differential Geometry, Graph Theory and Applications, Topics in Algebra, Knot Theory, Topology for Data Science **Westmont College** Calculus I and II, Multivariable Calculus, Introduction to Statistics, Finite Mathematics. **University of California, Santa Barbara** Calculus and Differential Equations B, A Transition to Higher Mathematics. Calculus for the Social Sciences A and B (TA); Calculus and Differential Equations A, B, and C (TA); Differential Equations and Linear Algebra A and B (TA); introductory graduate topology sequence (grader). **New England Institute of Art** Basic Math, Algebra I and II, Geometry, Patterns in Mathematics.**The Pennsylvania State University** Algebra II, Trigonometry, Calculus I, Linear Algebra, Mathematics for Elementary School Teachers.

STUDENT RESEARCH & HONORS PROJECTS SUPERVISED

Additivity of Knot Invariants Matt Cerrato, Will Fitch (2021); Ali Eser, Ziyan Zhang (2022). *L-invariant of the spun trefoil* Cindy Zhang (2021). *The width of knots* Charles Parham, Qidong He (2018). *Tying the Knot: Applications of Topology to Chemistry* Tarini Hardikar (2017). *Normal Surfaces and 3-manifold algorithms* Josh Hews (2017). *Some Examples of the Interplay between Algebra and Topology* Joseph Malionek (2017). *The curve complex and bridge position* Joseph Malionek, Muyuan Zhang (2016) *A fast algorithm for simplifying triangulations of the 2-sphere* Dan Medici (2015 — 2016). *Topological Data Analysis* Nick Murphy (2015 — 2016). *Bridge distance and twisting* Sami Turbeville (2015 — 2016). *Thin position for triangulations of surfaces* Nick Murphy, Dan Medici, Haoyu Song (2015). *Inequalities for Heegaard surfaces and bridge surfaces* Chris Burnham (2014 – 2015.) *Sequences of Reidemeister moves for unknot diagrams* Amar Sehic (Spring 2015). *New constructions of Brunnian theta graphs* Anna Kronauer, Dan Medici (2013 – 2014). *Studying unknotting number using combinatorial sutured manifold theory* Alex Rasmussen (2013). *Quandles and spatial graphs* Byoungwook Jang, Pratap Luitel (2012). *Software for drawing rational tangles* Pratap Luitel, Jonathon Brink-Roby (2012). *Vector Calculus and Low-Dimensional Topology* Jennie Buskin, Philip Prosapio (2011 arXiv:1301.1937). *Heegaard Splittings for Non-compact 3-manifolds related to the Cantor Set* Sarah Kirker (2011).

MATHEMATICS RESEARCH PRESENTATIONS

Eliminating Warts and Wrinkles from companions
Colby College Math Dept. Colloquium
Sept. 18, 2023.

Spatial graphs and bridge position of companion tori
(Invited) Knots, Surfaces, and 3-manifolds
BIRS-CMO workshop. June 14, 2023.

Handle structures and additivity
(Invited) Workshop on Circular Morse Functions
IMSA, University of Miami. Feb. 10, 2023

Equivariant Heegaard genus and spatial graphs
(Invited, Virtual) AMS Fall Southeastern Sectional
Meeting. Nov. 20, 2021.

Nonadditivity of equivariant Heegaard genus
(Invited) Knots, Surfaces, 3-manifolds
BIRS-CMO online workshop. June 22, 2021.

(Non)Additivity of Spatial Graph Invariants
(Invited) Special Session on Developments in Spatial
Graphs. JMM 2021.

A new look at bridge number
(Invited) Special Session on Invariants of Knots and
Links. JMM 2021.

Equivariant Heegaard genus of reducible 3-manifolds
Geometry and Topology Online Seminar (Warwick).
July 27, 2020.

Making non-additive invariants additive
Trends in Low Dimensional Topology (online seminar).
June 30, 2020.

A Kirby-Thompson Invariant for Genus 0 Bridge Trisections
Virtual Trisectors Meeting. April 15, 2020.

*Lower bounds on the tunnel number of composite spatial
theta-graphs* CKVK* online asynchronous online semi-
nar, June 15, 2020/(Invited) Virginia Commonwealth
University, Geometry & Topology Seminar. May 15,
2020 (online)/University of Oxford, Topology Semi-
nar. October 21, 2019.

Turning Non-additive Knot Invariants Additive (Invited)
USMA. November 16, 2017.

Additive Invariants of Knots, Links, and Graphs in 3-Manifolds
(Invited) University of Nebraska, Lincoln Topology
Seminar. March 15, 2017/(2 invited talks) University
of California, Berkeley Topology Seminar. April 7,
2017.

Constrained Flexibility Colby College Mathematics &
Statistics Colloquium, March 13, 2017.

The bridge distance of knots Williams College Faculty
Mathematics Seminar. November 11, 2016.

Additive Invariants of Knots, Links, and Graphs
(Invited) Special Session on the topology of 3- and 4-
manifolds. Fall AMS Central Sectional Meeting, St.
Thomas University, October 28, 2016/(Invited) Boston
College Topology Seminar. April 21, 2016.

Neighbors of Knots in the Gordian Graph Colby College
Mathematics & Statistics Colloquium. April 11, 2016/
(Invited) Wesleyan University Topology Et Al. Seminar.
March 23, 2016/(Invited) University of Miami (Flor-
ida) Topology Seminar. March 16, 2016.

Of Knots and Surfaces. (Invited) University of Maine,
Orono Mathematics & Statistics Colloquium. Oct. 21,
2014/Colby College Mathematics & Statistics Collo-
quium. Oct. 27, 2014

(A) width is additive. The Thin Manifold: a conference
on knots and 3-manifolds. Aug. 10, 2014.

*Edge Away: geometric and topological properties of almost un-
knotted graphs.* Colby College Science Lunch. Feb. 18,
2014.

*Bridge distance as an obstruction to exceptional and cosmetic
surgeries.* Colby College Faculty Forum. Sept. 19, 2013.

Almost Unknotted Graphs: Examples, Theorems, Conjectures
(Invited). Iowa State University. April 28, 2013. Special
Session on the Topology of 3-Manifolds, Spring AMS
Central Sectional Meeting.

Exceptional Surgeries and Bridge Distance
(**Invited Mini-course**). CIMAT, Guanajuato. De-
cember 17–20, 2012. School on Knot Theory and 3–
Manifolds in honor of Fico González-Acuña.

Knots with exceptional surgeries have low bridge distance
(**Invited Plenary**). Mankato. July 28, 2012. Summer
Topology and its Applications.

Attaching a 2-handle to a suture (Invited). Mankato. July 27,
2012. Summer Topology and its Applications. /
(Invited). Mexico City. March 22, 2012.
Spring Topology and Dynamics Conference.

Recent Progress on the Cabling Conjecture (Invited). U. Iowa
Topology Seminar. March 20, 2012.

Graphs in Space. Colby College Science Lunch.
February 7, 2012.

Recent Progress on the Cabling Conjecture (Invited). Bates
College. January 9, 2012. Collaborative Conference on
Geometry-Topology-Group Theory.

Thin Position for Graphs in 3-Manifolds. College of the
Holy Cross. April 9, 2011. Special Session on Thin
Position, Spring AMS Eastern Sectional Meeting.

Thin Position for Graphs in 3-Manifolds (Invited). Universi-
ty of Iowa. March 18, 2011. Special Session on Thin
Position, Spring AMS Central Sectional Meeting.

RESEARCH PRESENTATIONS (CONTINUED)

A Knot Theorist's Guide to Being Thin (Invited). Colby College Mathematics Colloquium. February 11, 2010.

It's Good to be Thin: Knots, Graphs, and 3-Manifolds (Invited). Bowdoin Mathematics Seminar. November 10, 2009.

Leveling Heegaard Spines (Invited). Boston College Topology Seminar. October 22, 2009.

Combinatorial Sutured Manifold Theory: Past and Present (Invited). U. Iowa Mathematics Colloquium. April 23, 2009.

Boring Split Links and Unknots (Invited). U. Iowa, LSU, Rice U. Joint Topology Seminar. April 22, 2009.

Interesting Surfaces in Knot Exteriors After Rational Tangle Replacement (Invited). Bates College. November 14, 2008. Colby-Bates-Bowdoin Mathematics Seminar.

Adding 2−Handles to Sutured Manifolds (Invited). Boston College Topology Seminar.. September 25, 2008.

Sutured Manifold Theory and Rational Tangle Replacement. Snowbird. June 14 − 20, 2008. *Teichmüller Theory & Low-dimensional Topology Mathematical Research Community.*

Boring Split Links and Unknots (Invited). Claremont. May 4, 2008. *Special Session on Knot Theory and the Topology of 3−Manifolds, AMS Western Sectional Meeting.*

Boring Split Links and Unknots. UCSB Topology Seminar. March 4, 2008.

Split Links & Unknots obtained by Refilling Meridians of Genus 2 Handlebodies (Poster). San José. August 5, 2007. MathFest.

Unique Heegaard Splittings of Deleted Boundary 3−Manifolds (Invited). Claremont Topology Seminar. October 10, 2006.

Non-compact Heegaard Splittings and a Theorem of Casson and Gordon. Park City. July 10, 2006. Park City Mathematics Institute Research Program.

Non-compact Heegaard Splittings of Deleted Boundary 3−Manifolds. Durham. April 22−23, 2006. Special Session on Geometric Methods in Group Theory and Topology, Spring AMS Sectional Meeting.

Non-compact Heegaard Splittings. UCSB Topology Seminar. November 8, 2005.

GENERAL AUDIENCE PAPERS AND PRESENTATIONS

Talks about Sum Camp:
SIMIODE Expo, Feb. 11, 2022. (Online)
Joint Math Meetings, Jan. 6 2023

Knotty Mathematics: How Knots and 3-dimensional Spaces are Interlinked. Colby Spotlight Lecture for Prospective Students (online), November 11, 2020.

Working at a Liberal Arts College UC Santa Barbara Mathematics Department, September 30, 2019.

The Mathematics of Knotted Objects. **(Plenary)** North Shore Undergraduate Math Conference, Gordon College. April 6, 2019/Spotlight Lecture for Prospective Students Day, Colby College. August 10, 2018/Colby College Mathematics and Statistics Colloquium. September 10, 2018.

When is a knot not knotted? Carleton College Mathematics Colloquium. January 16, 2012/Colby College Mathematics Colloquium. September 10, 2012/Salem State Mathematics Colloquium. February 25, 2013/Gordon College Mathematics Colloquium. March 26, 2013.

Terry Winters, Knot Theory, and In Blue. Colby College Museum of Art Noontime Art Talk. March 17, 2011.

What is … *the Hopf Fibration?* Colby College Mathematics and Statistics Colloquium. September 21, 2009.

(Not so) boring knots: An introduction to combinatorial methods in knot theory. Colby College Mathematics and Statistics Colloquium. March 12, 2008.

Poincaré's Conjecture and Whitehead's Infinite Swindle. Colby College Mathematics and Statistics Colloquium. November 3, 2008/Westmont College Natural and Behavioral Sciences Seminar. February 29, 2008.

The Well-Roundedness of Spheres Graduate Seminar, California State University, Channel Islands. October 5, 2005.

The Quoolness of Quandles UCSB Mathematics Student Seminar. November 15, 2004.

Topology and Division Algebras. UCSB Mathematics Student Seminar. March 3, 2004.

Mathematics and Numerology in the Movie "Pi". Undergraduate Math Club, UCSB. November 23, 2002/Student Film Club, New England Institute of Art. October 15, 2001.

OUTREACH

July 2022 — 2024, producer for Sum Camp.

July 2019, founder and camp director for Sum Camp, a summer camp using the arts to develop numeracy in elementary school children.

January - June 2018, member of Superintendent's committee to review K - 12 mathematics in Waterville public schools.

2014 – 2019, Math Mules founder and organizer. Program for Colby students to help with mathematics in Waterville public elementary schools.

March 2017 & 2018, organized & ran Imagine Math Day: a day of creative, non-competitive math for high school students.

Summer 2015, "Dissecting a sphere: an introduction to mathematical reasoning", Colby Staff Retreat.

Summer 2014, "A mathematical view of symmetry", Colby Achievement Program in the Sciences summer program.

Summer 2013, "Cohomology of Surfaces" at MathCamp.

Summers 2011 & 2012, "A mathematical view of symmetry", Colby Museum of Art.

SERVICE TO THE DISCIPLINE

MAA Euler Prize Committee, member 2017 –2021; chair 2022 – 2023.

Referee at various times for *Topology and Its Applications*, *Algebraic & Geometric Topology*, *Transactions of the American Mathematical Society*, *Journal of Mathematical Society of Japan*, *Proceedings of the American Mathematical Society*, *Communications in Analysis and Geometry*, *PRIMUS*, *Convergence*, *Journal of Graph Theory*, *Contemporary Mathematics*, *Journal of Knot Theory and Its Ramifications*, *Journal of Topology*, *Fundamenta Mathematicae*, *American Mathematical Monthly*.

Co-organizer (with Tao Li) of *Special Session on Decomposing 3-manifolds* at the 2016 Fall AMS Eastern Sectional Meeting, September 24-25, 2016 at Bowdoin College.

Co-organizer (with Maggy Tomova) of *The Thin Manifold* (a conference on knots and 3-manifolds) August 8 – 10, 2014 at The University of Iowa.

Co-organizer (with David Damiano and Helen Wong) of *Special Session on Topological, Geometric, and Quantum Invariants of 3--Manifolds* at the 2011 Spring AMS Eastern Sectional Meeting, April 9-10, 2011. College of the Holy Cross, Worcester, Massachusetts.

Reviewer for Math ZentralBlatt, MathReviews, and MAA Math Reviews at various times.

External program reviewer for Minerva University, College of Computational Sciences, 2020.

SERVICE TO THE DEPARTMENT (MOST SIGNIFICANT IN BOLD)

Director of Colby Community Math Mentorship Program, 2016 - 2018. Local organizer for CBB and CBB-Mellon seminars, 2010 – 2019, 2023. **Chaired TT/continuing search** 2015–2016, 2018–2019, 2019–2020, 2021–2022. Member of departmental search committees, 2013-2014, 2016-2017, 2023. Review Committees and Peer Reviewer 2015–present. Member of the Committee for Distribution of the Berger Funds, 2013 – 2019, 2020–.

Co-organizer of the Colby College Mathematics and Statistics Colloquium, 2008 – 2010, 2013 – 2016, 2018 – 2019, 2021 – 2022. Colby College Mathematics and Statistics Department (co-)Webmaster, 2009 – 2019. Colby College Mathematics and Statistics Department Social (co-)Organizer 2010 – 2011; 2011 – 2012. Organizer and Proctor for the American Mathematics Competition at Colby College, 2011 – 2012. Co-organized Colby College IBM Lecture by Keith Devlin, 2009 – 2010.

SERVICE TO THE COLLEGE, SEPTEMBER 2008 - PRESENT (MOST SIGNIFICANT IN BOLD)

Academic Integrity Coordinator (Inaugural), 2015 − 2019. **Promotion & Tenure Committee**, 2018 − 2019, 2020 − 2021. First year review committee for ES 2021. Search committee for Assistant Dean of Conduct, Summer 2017. Communications Advisory Committee, 2016 − 2019. Funded Internship Review Committee, 2013 − 2016. **Academic Affairs Committee**, 2013 − 2015. **AAC-CAC subcommittee on academic dishonesty**, 2013 − 2015. Library Committee, 2011 − 2012. Search committees for Director of Colby Writing Project, 2011 − 2012, Psychology Department Faculty Fellow, 2010 − 2011.

EMPLOYMENT (PRE-PHD)

Westmont College	Instructor	2006 − 2007.
Santa Barbara, California	Adjunct Instructor	2004 − 2005, Fall 2007.
University of California	Teaching Assistant	2002 − 2006, Fall 2007.
Santa Barbara, California	Teaching Associate	Summer 2004, Winter 2006.
	Research Assistant	Winter, Spring 2008; Summers 2004 − 2007.
New England Institute of Art	Instructor	2000 − 2002.
Brookline, Massachusetts.		
Pennsylvania State University	Teaching Assistant	1998 − 2000.
State College, Pennsylvania.		

HONORS AND AWARDS

2019	"Community Award" from the Waterville Board of Education in recognition of my support of mathematics in the Waterville Public Schools
2006	"Outstanding Professor" from UCSB Residence Halls Association and Office of Residential Life.
2003 − 2006, 2007 − 2008	Math Department Fee Fellowship, UCSB.

SUMMER SCHOOLS/WORKSHOPS ATTENDED

BIRS-CMO Workshop on "Knots, Surfaces, and 3-manifolds" (online). June 11-16, 2023.

BIRS-CMO Workshop on "Knots, Surfaces, and 3-manifolds" (online). June 23 - 25, 2021.

Virtual Summer Trisectors Workshop (online). June 22 - 25, 2020; June 1 - 5, 2021.

Contact Structures, Laminations and Foliations. Munich, Germany. September 5 − 9, 2016.

School on Knot Theory and 3−Manifolds, CIMAT, Guanajuato. December 17−20, 2012.

Junior Topologists' Research Retreat. Davis, California. June 23 − 29, 2009.

Teichmüller Theory & Low-dimensional Topology, Mathematical Research Community. Snowbird, Utah, June 24 − 20, 2008.

IAS/PCMI Graduate Summer School in Low-Dimensional Topology. Park City, Utah, June 25 − July 15, 2006.

MSRI/PIMS Summer Graduate Programme: "Knots and 3−Manifolds" University of British Columbia, July, 2004.

SERVICE AT OTHER INSTITUTIONS

Westmont College Orchestra. 2006 − 2007. **UCSB** Organized the Graduate Student Topology Seminar. 2004 − 2005 (approx.) **NEIA** Institutional Effectiveness Committee 2001 − 2002; Library Committee 2001 − 2002.