

Laura P. Schaposnik M. (January 15, 2025)

PERSONAL INFORMATION	Department of Mathematics, University of Illinois, Chicago, IL 60607, USA	Born: 20 July, 1985 in La Plata, Argentina Email: lauraschaposnik@gmail.com https://schapos.people.uic.edu
EMPLOYMENT	Professor , University of Illinois at Chicago, USA. since 2022 Associate Professor , University of Illinois at Chicago, USA. 2018-2022 Assistant Professor , University of Illinois at Chicago, USA. 2015-2018 L.Doob. Research Assistant Prof. , University of Illinois at Urbana-Champaign, USA. 2013-2015 Wissenschaftlicher Assistent , Heidelberg University, Heidelberg, Germany 2012-2013 Stipendiary Lecturer in Mathematics , Trinity & Magdalen College, Oxford, UK. 2011-2012 Retained Lecturer in Mathematics , Hertford College, Oxford, UK. 2010-2011 Tutor in Mathematics , New College, St. Peter's College, Lincoln College. 2009-2011	
EDUCATION	University of Oxford . New College, Oxford, UK. 2008-2013 D.Phil. in Mathematics, Advisor: Prof. Nigel Hitchin. National University of La Plata . La Plata, Argentina. 2004-2008 Lic. en Matematica (MMath equiv.). Grade: 10/ 10. Advisor: Prof. Jorge Solomin. Conservatory Gilardo Gilardi . Music Conservatory, La Plata, Argentina. 2003-2007	
VISITING POSITIONS	9. Visiting Fellow, All Souls College, University of Oxford, UK. Spring 2023 8. Visiting professor, Mathematical Institute, University of Oxford, UK. Spring 2023 7. Research Professor, Mathematical Sciences Research Institute, USA. Fall 2022 6. Research Member, Mathematical Sciences Research Institute, USA. Fall 2019 5. Alexander von Humboldt fellow, Freie Universität Berlin, Germany. Summer 2019 4. Visiting Associate Professor, Simons Center for Geometry and Physics, USA. Spring 2019 3. Visiting Fellow, New College, University of Oxford, UK. Fall 2018 2. Visiting professor, Mathematical Institute, University of Oxford, UK. Fall 2018 1. Alexander von Humboldt Fellow, Freie Universität Berlin, Germany. Fall 2017	
AWARDS AND GRANTS 2014 - <i>present</i> (~ US\$ 4.3M)	323. <i>Presidential Early Career Award for Scientists and Engineers (PECASE)</i> 2025 322. <i>NSF RTG: Algebra, Geometry, and Topology</i> (Key Personnel, (PI) Coskun) 2021-2026 321. <i>NSF FRG DMS 2152107</i> (PI w/ Mulase, Sawon, Dumitrescu) (US\$ 1.4m). 2022-2025 320. <i>NSF CAREER Award DMS 1749013</i> : (PI) (US\$ 400k). 2018-2025 319. <i>UIC Start-up Package</i> (US\$ 365k). 2015-2025 318. <i>DoD STEM & UIC's SROP program</i> (Summer support) (US\$ 10k). 2024 317. <i>Mottez fellowship</i> , IHP Paris, France. (US\$4k) 2023 316. <i>Krainz Foundation Research Award</i> , PI (US\$10k). 2023 315. <i>London Mathematics Society Conference grant</i> , PI. (US\$3k) 2023 314. <i>Heilbronn Conference grant</i> , PI. (US\$6k) 2023 313. <i>BIRS Conference grant</i> , PI, w/ Anderson, Rayan and Schafer-Nameki. (US\$50k) 2023 312. <i>BIRS Conference grant</i> , co-PI, w/ (PI) Mulase, et al. (US\$50k) 2023 311. <i>IHP: Research in Pairs</i> (with Steven Rayan and Emanuele Macri) (US\$10k) 2023 310. <i>Simons Fellowship</i> (PI) (US\$ 100k). 2022-2023 309. <i>MSRI Semester</i> (Co-PI, w/ Fredrickson, Mazzeo, Mrowka, (PI) Walpuski) (US\$ 1m) 2022 308. <i>NSF Conference Award – “Unity of Mathematics”</i> (PI) (US\$ 48k). 2021 307. <i>UIC Visitor's fund award</i> (To host 7 visitors), (US\$10k). 2018-2020 306. <i>NSF DMS 1929915</i> (PI, L. Anderson Co-PI) (US\$ 9k). 2019	

	305. Simons Center for Geometry and Physics (\sim US\$ 300k),	2019
	304. SCGP , Conference Grants (PI w/ L. Anderson, US\$ 35k \times 2).	2019
	303. Oberwolfach Conference grant (PI, w/ Anderson, Hausel and Mazzeo)(US\$ 50k).	2019
	302. Alexander von Humboldt Fellowship (US\$ 40k)	2017-2019
	301. NSF Research grant DMS 1509693 and DMS 1611835 (PI) (US\$ 144k)	2015-2019
	300. UIC Research Award , through UFRP program (US\$ 30k).	2015-2018
	299. Conference grant via NSF RTG grant DMS-1246844 (PI: L. Ein). (US\$ 45k)	2016-2018
	298. UIUC Math Department Conference grant (US\$ 5k).	2017
	297. NSF Conference grants through GEAR Network (PI), (US\$ 90k).	2015-2017
	296. American Institute of Mathematics (PI), Conference Grant (US\$ 35k \times 2).	2015-2017
	295. Long & Short visit grants via GEAR Network (US\$ 30k),	2014-2017
	294. SCGP (PI w/Anderson), Conference Grant (US\$ 30k).	2016
	293. IHP trimester participant support (\times 2), Institut Henri Poincaré (US\$ 4k)	2012-2016
	292. AMS Simons Travel Grant (US\$ 4k)	2014-2015
	291. Public Engagement Grant , UIUC w./ Delcourt (PI) & Kedem.	2014-2015
MEMBERSHIPS	10. Fellow of UIC Honors College .	<i>since</i> 2021
	9. Member of the American Mathematical Society (AMS).	<i>since</i> 2017
	8. Member of the Unión Matemática Argentina (UMA).	<i>since</i> 2017
	7. Faculty member of the GEAR Network .	<i>since</i> 2015
	6. Faculty mentor for PRIMES-MIT , Massachusetts Institute of Technology.	<i>since</i> 2014
	5. Member of the AWM Gweneth Humphreys Award Selection Committee	2022-2025
	4. Member of the Hitchin-Ngo Lab . ICMAT, Madrid, Spain	2021-2023
	3. Member of the AWM Joan & Joseph Birman Prize Committee .	2019-2023
	2. Co-Chair of the AMS Joint Committee on Women in Maths. (JCW).	2017-2018
	1. Representative of the Association of Women in Mathematics (AWM) at JCW .	2015-2018
SUPERVISION OF PHD STUDENTS	2. Hassan Babaei , (Co-supervised with Jerry Bona and Mimi Dai, PhD Student, UIC) Thesis on mathematical physics and PDE's.	<i>Expected 2026</i>
	1. Mengxue Yang , (UIC) “On generalized B -opers”.	January 2022
	1. Christopher Mahadeo , (PhD Saskatchewan).	2023 - 2026
PHD AND MASTER THESIS COMMITTEES	4. Fabiola Cordero , PUC-Rio, Brazil.	2021
	3. Juan Sebastián Numpaque , Universidad de los Andes, Colombia.	2021
	2. Keaton Quinn and Charles Alley , University of Illinois at Chicago, USA.	2019-2020
	1. Thesis reviewer , Roma Tre University, Italy	2019
SUPERVISION OF RESEARCH PROJECTS	20. Alyssa Yu , Supervised through MIT PRIMES-USA .	2025
	19. Vaidehi Ramachandrula , (High School) year-long independent project.	2025
	18. Sanjay Dagam , Wisconsin independent research student.	2023-2025
	17. Ashna Dagam , Wisconsin independent research student.	2023-2025
	16. Ansh Shah , (High School) year-long independent project.	2024
	15. Caleb Williams , Summer Research Opportunities Program for Undergraduates, UIC	2024
	14. Marina Lin , Supervised through MIT PRIMES-USA .	2024
	13. Raina Wu , Supervised through MIT PRIMES-USA .(now at MIT)	2023
	12. Varun Mittal , Chicagoland High school student. (now at UIUC).	2022
	11. Grace Wang , Supervised through MIT PRIMES-USA (now at MIT).	2022
	10. Sheryl Hsu , Supervised through MIT PRIMES-USA (now at Stanford).	2021
	Regeneron Science Scholar 2021 ; JMM MAA Undergraduate Poster Session presenter .	

9. **Vishaal Ram**, Supervised through [MIT PRIMES-USA](#) (then *MIT*). 2020
[Regeneron Science Scholar 2020](#); [2020 S.-T. Yau High School Science Bronze Award](#).
8. **Yuyuan Luo**, Supervised through [MIT PRIMES-USA](#) (then *MIT*). 2019
[JMM Outstanding Poster Presentation Award](#).
7. **Rinni Bhansali**, Supervised through [MIT PRIMES-USA](#) (then *Stanford*). 2018 [Regeneron Scholar 2019](#); [JHSH National Finalist 2019](#); [JMM MAA session speaker](#).
6. **Rachana Madhukara, Kevin Ren, Anlin Zhang** (High School, California). 2017
[Group National Finalist](#) in the 2017 [Siemens Competition](#).
5. **Anlin Shang**, Supervised through [MIT PRIMES-USA](#) (then *Princeton*). 2017
4. **Kai-Siang Ang**, Supervised through [MIT PRIMES-USA](#) (then *Stanford*). 2016 [Regeneron Science Talent Search Scholar 2017](#).
3. **Jessica Li**, Supervised through [IGL](#) and [MIT PRIMES-USA](#) (then *Harvard*). 2014
Semifinalist in the 2014 [Siemens Competition](#) and [Intel Competition](#) (among others);
2. **C. Da, M. Zosky, J. Li, C. Formosa** (Supervised through [IGL](#)). 2014

INTERNATIONAL
MEETINGS
ORGANIZED

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42. **Co-Organizer**, with Ruxandra Moraru and Steven Rayan July 2025
MCA Special Session: [“Vector Bundles on Varieties and Quantization”](#), Miami, USA.
 41. **Co-Organizer**, with Ruxandra Moraru and Steven Rayan January 2025
JMM Special Session: [“Vector Bundles and Quantization”](#), Seattle, USA.
 40. **Co-Organizer**, with Unwin, Imbo, et. al. August 2024
UIC: [“Quantum Theory at the extremes”](#), Chicago, USA.
 39. **Co-Organizer**, with Mulase, Dumitrescu, Cruz Morales & Garcia Failde October 2023
BANFF: [“Complex Lagrangians, Mirror Symmetry, and Quantization”](#), Banff, Canada.
 38. **Co-Organizer**, with C. Mahaedo and M. Yang, University of Oxford, UK June 2023
[“Workshop and school on Complex Lagrangians, Integrable Systems, and Quantization”](#).
 37. **Co-Organizer**, with Anderson, Rayan and Bourget May 2023
BIRS: [“The Geometry, Algebra, and Physics of Higgs Bundles”](#) BIRS-Okanagan, Canada.
 36. **Co-Organizer**, with Fredrickson, Mazzeo, Mrowka and Walposki Fall 2022
MSRI Semester: [“Analytic and geometric aspects of gauge theory”](#), Berkeley, USA.
 35. **Co-Organizer**, with Lara Anderson. August 2022
MSRI: [“Connections for Women Workshop”](#), Berkeley, USA
 34. **Co-Organizer**, with Brian Collier June 2022
UIC: [“Geometric structures \(re\)United”](#), UIC, USA.
 33. **Co-Organizer**, international conference in Sir Michael Atiyah’s memory September 2021
Newton Institute: [“Unity of Mathematics”](#), Newton Institute, Cambridge, UK
 32. **Co-Organizer**, w/ James Unwin. Second in a series of workshops “SIDE Math”. June 2021
UIC: [“Selected Interdisciplinary Directions of Entertaining Mathematics 2021”](#), UIC, USA.
 31. **Co-Organizer**, w/ James Unwin. First in a series of workshops “SIDE Math”. June 2020
UIC: [“Selected Interdisciplinary Directions of Entertaining Mathematics 2020”](#), UIC, USA.
 30. **Co-Organizer**, w/ Athreya, Bradlow, Gukov, Neitzke, Zorich, Weitze-S. November 2019
MSRI: [“Holomorphic Differentials in Mathematics and Physics ”](#), Berkeley, USA.
 29. **Co-Organizer**, with A. Mandini, M. Verbitsky, and A. Zorich. June 2019
IMPA: [“Teichmüller Theory, Hyperbolicity and Dynamics”](#), IMPA, Brazil.
 28. **Co-Organizer (chair)**, with L. Anderson, T. Hausel, and R. Mazzeo. May 2019
Oberwolfach: [“Geometry and Physics of Higgs bundles”](#), Oberwolfach (MFO), Germany.
 27. **Co-Organizer** with L. Anderson, 1-semester program. Spring 2019
SCGP: [“Geometry and Physics of Hitchin Systems”](#), SCGP, USA.
 26. **Co-Organizer (chair)** with L. Anderson. Fifth in a series of workshops. May 2019
SCGP: [“Current trends in spectral data for Higgs bundle V”](#), SCGP, USA.
 25. **Co-Organizer (chair)** with L. Anderson, R. Mazzeo, and T. Pantev. March 2019
SCGP: [“Challenges at the Interface of Hitchin Systems and String Theory”](#), SCGP, USA.

24. **Co-Organizer (chair)**, with R. Arroyo, B. Davison, M. Logares, M. Mereb. December 2018
UBA: “[Current Trends on Hitchin Systems](#)”, UBA, Argentina.
 23. **Organizer**, Fourth of a series of Two-day workshops. November 2018
Oxford: “[Current trends in spectral data for Higgs bundle IV](#)”, Oxford, UK.
 22. **Organizer**, Third of a series of Two-day workshops. November 2017
UIC: “[Current trends in spectral data for Higgs bundle III](#)”, UIC, USA.
 21. **Co-Organizer (chair)**, with L.B. Anderson, J.M. Esole and L. Fredrickson October 2017
AIM: “[Singular Geometry and Higgs Bundles in String Theory](#)”, AIM Workshop.
 20. **Co-Organizer** with Florent Schaffhauser and Richard Wentworth July 2017
MCA: “[Geometry and Physics of Higgs bundles](#)”. Special Session, MCA2017, Canada.
 19. **Co-Organizer (chair)**, with B. Collier and G. Daskalopoulos May 2017
Allerton: “[Geometry and Physics of Augmented Bundles](#)”. Allerton, Illinois, USA.
 18. **Co-Organizer**, with D. Dumas, A. Furman, D. Groves, and K. Whyte February 2017
UIC: “[Chicago Action Now II](#)”, UIC, USA.
 17. **Co-Organizer** with Bernardo Uribe et. al. July 2016
CLAM: “[Fifth Latin American Congress of Mathematics](#)”, Barranquilla, Colombia.
 16. **Co-Organizer** with Florent Schaffhauser and Richard Wentworth. July 2016
CLAM: “[Higgs bundles and real character varieties](#)”, Special Session, CLAM V, Colombia.
 15. **Co-Organizer (chair)**, with L. B. Anderson, D. Baraglia and V. Shende June 2016
SCGP: “[New perspectives on Higgs bundles, branes and quantization](#)”, SCGP, USA.
 14. **Co-Organizer (chair)**, with Lara B. Anderson June 2016
SCGP: “[Current trends on spectral data for Higgs bundle II](#)”, SCGP, USA.
 13. **Co-Organizer (chair)**, with J. Andersen, D. Baraglia, P. Boalch September 2015
AIM: “[Spectral data for Higgs bundles](#)”, AIM Workshop.
 12. **Organizer**, Weekend workshop. October 2015
AIM: “[Current trends on spectral data for Higgs bundles I](#)”, AIM, USA.
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13. **Organizer**. UIC, USA. November 2024
UIC: “[Mathematics within Society](#)”.
 12. **Co-Organizer**. UIC, USA. with Benjamin Call and Noelle Sawyer September 2024
UIC: “[Big ideas in Dynamics and Higgs bundles](#)”.
 11. **Co-Organizer**. UIC, USA. with Ross, Sinapova, Perkins, et. al. October 2021
UIC: “[GROW 2021: Graduate Research Opportunities for Women](#)”.
 10. **Co-Organizer**. UChicago, USA. with Corlette, Masur, May, Calegari, et. al. October 2020
UChicago: “[GROW 2020: Graduate Research Opportunities for Women](#)”.
 9. **Co-Organizer (chair)** with L. Anderson, S. Katz and J. Teschner. May 2019
SCGP: “[Graduate Summer School on Hitchin systems](#)”, SCGP, USA.
 8. **Co-Organizer (chair)** with L. Anderson; Series of Two-day workshops. March 2019
SCGP: “[Workshop on the geometry and physics of Higgs bundles IV](#)”. SCGP, USA.
 7. **Co-Organizer**, with Steve Rayan. Prince Albert National Park, Canada. August 2018
PANP: “[Geometry and Physics of Gauge Theories](#)”.
 6. **Organizer**, Graduate students’ workshop. UIC, USA. June 2018
UIC: “[RTG Workshop on the geometry and physics of Higgs bundles III](#)”.
 5. **Organizer**, Graduate students’ workshop. UIC, USA. Nov. 2017
UIC: “[RTG Workshop on the geometry and physics of Higgs bundles II](#)”.
 4. **Organizer**, One day graduate workshop for students of UIC, USA. May 2017
UIC: “[Graduate day on Geometry and Topology II](#)”.
 3. **Organizer**, One day graduate workshop for students of UIC, USA. November 2016
UIC: “[Graduate day on Geometry and Topology I](#)”.
 2. **Organizer**, Graduate students’ workshop. UIC, USA. October 2016
UIC: “[RTG Workshop on the geometry and physics of Higgs bundles I](#)”

MEETINGS
ORGANIZED
FOR STUDENTS
AND POST-DOCS

	1. Co-Organizer (with Andy Sanders, Michelle Lee and Sara Maloni), GEAR: GEAR Junior Retreat (10 days - 150 participants, US\$ 300 k budget).	May 2014
MINI-COURSES	15. <i>Universidad de Costa Rica</i> , San José, Costa Rica. 3 Hrs - Lectures on Higgs bundles.	August 2025
	14. <i>University of North Caroline at Chapel Hill</i> , Chapel Hill, USA. 3 Hrs - Lectures on Higgs bundles.	April 2025
	13. <i>Osaka Metropolitan University</i> , Osaka, Japan. 3 Hrs - Lectures on Higgs bundles.	May 2024
	12. <i>Universidad Nacional de La Plata</i> , La Plata, Argentina. 3 Hrs - Lectures on percolation theory.	April 2023
	11. <i>University of Oxford</i> , Oxford, UK. 3 Hrs - Masterclass on knot theory.	March 2023
	10. <i>Universidad Nacional de La Plata</i> , La Plata, Argentina. 3 Hrs - Lectures on knot theory.	November 2022
	9. <i>Undergraduate geometry & topology workshop</i> , Notre Dame, USA. 3 Hrs - Lectures on knot theory.	August 2022
	8. <i>IAS/Park City Mathematics Institute (PCMI) 2019 Program</i> , Park City, USA. 4 Hrs - Lectures on Gauge theories intended for ~ 150 participants.	August 2019
	7. <i>Junior GEAR Retreat 2017</i> , Stanford University, USA. 3 Hrs - Lectures on Higgs bundles intended for ~ 100 participants.	August 2017
	6. <i>Summer program for undergraduate women</i> , UBC, Vancouver, Canada. 16 Hrs - Lectures on Knot theory intended for undergraduate students.	August 2016
	5. <i>School on Higgs bundles</i> , ICTS, Bangalore, India. 4 Hrs - Lectures on Higgs bundles intended for graduate students and faculty.	March 2016
	4. <i>Pohang Mathematics Institute</i> , Pohang, Korea. 3 Hrs - Lectures on Higgs bundles intended for graduate students and faculty.	November 2014
	3. <i>Summer School on the moduli space of Higgs bundles</i> , NUS, Singapore. 2 Hrs - Lectures on Higgs bundles.	July 2014
	2. <i>University of California at Davis</i> , California, USA. 3 Hrs - Lectures on Higgs bundles intended for graduate students and faculty.	January 2014
	1. <i>Faculté des Sciences d'Orsay</i> , Université Paris-Sud, France 2 Hrs - Lectures on Higgs bundles intended for undergraduate and graduate students.	April 2013
COLLOQUIA AND PLENARY TALKS (*)	30. Michigan State University , East Lansing, USA.	April 2025
	29. Tata Institute for Fundamental Research , Bombay, India.	February 2025
	28. University of Illinois, Chicago , Chicago, USA.	October 2023
	27. All Souls College evening series , Oxford, UK.	January 2023
	26. Heilbronn Annual Meeting *, Bristol, UK.	September 2022
	25. YSP at UIC *, Chicago, USA.	June 2021
	24. Real Sociedad Matemática Española *, Spain (Online).	May 2021
	23. Cibercoloquio Latinoamericano de Matemáticas , Brazil (Online).	April 2021
	22. Unión Matemática Argentina *, Annual meeting, Argentina (online).	September 2020
	21. ($\times 2$) <i>University of Illinois at Chicago</i> , USA.	March 2016, March 2020
	20. <i>Rutgers University - Newark Campus</i> , USA.	April 2019
	19. <i>Stony Brook University</i> , Stony Brook, USA.	March 2019
	18. <i>Simons Center for Geometry and Physics</i> , Stony Brook, USA.	February 2019
	17. Iberoamerican Congress on Geometry *, Valladolid, Spain.	January 2018

16. <i>Northeastern University</i> , Boston, USA.	January 2018
15. <i>University of Utah</i> , Salt Lake City, USA.	January 2018
14. <i>University of Washington</i> , Seattle, USA.	January 2018
13. <i>University of Notre Dame</i> , South Bend, USA.	January 2018
12. <i>Center for Mathematical Physics</i> , Hamburg, Germany.	June 2017
11. <i>Universidad Nacional de La Plata</i> , Argentina.	May 2017
10. <i>Indiana University-Purdue University Indianapolis</i> , USA.	November 2016
9. <i>String-Maths 2016</i> *, Collège de France, Paris, France.	July 2016
8. [†] <i>Colorado State niversity</i> , Denver, USA.	February 2015
7. <i>University of North Carolina at Chapel Hill</i> , USA.	January 2015
6. <i>University of Boston</i> , Massachusetts, USA.	January 2015
5. <i>University of Minnesota</i> , Minneapolis, USA.	January 2015
4. <i>Purdue University</i> , West Lafayette, USA.	December 2014
3. <i>University of Illinois at Chicago</i> , Chicago, USA.	December 2014
2. <i>Boston College</i> , Boston, USA.	November 2014
1. <i>Pohang Mathematics Institute</i> , Pohang, Korea.	November 2014

CONFERENCE
AND WORKSHOPS:
LIST SINCE 2012
(5 BEFORE THAT)

FOR PERSONAL
REASONS I'VE BEEN
DECLINING
INVITATIONS TO SPEAK
AND INSTEAD BEING
AN ACTIVE
PARTICIPANT, THIS IS
NOW INDICATED WITH
THE BLUE *

62. <i>Midwest Panorama of Geometry and Topology</i> , University of Iowa, USA.	June 2025
61. <i>de Cataldo 60 conference</i> , SCGP, USA.	May 2025
60. (Higher rank) <i>geometric structures, Higgs bundles and physics</i> , IHP, France.	May 2025
59. <i>Midwest Topology Seminar in honor of Stephan Stolz</i> , South Bend, USA	March 2025
58. <i>Algebraic and Analytic Geometry</i> , Shiv Nadar Institution of Eminence, India	February 2025
57. <i>Integrability, geometry and QFTs: 1st MaPhyAg</i> , Madrid, Spain.	October 2024
56. <i>Advances in Higgs bundles</i> *, Maryland, USA.	April 2024
55. <i>NITMB Emerging Directions Workshop</i> , Chicago, USA.	February 2024
54. <i>General Geometries and Gauge Theory</i> *, Miami, USA.	December 2023
53. <i>Brussels-London Geometry day</i> , London, UK.	April 2023
52. <i>Analytic and Geometric Aspects of Gauge Theory</i> , MSRI, Berkeley, USA.	August 2022
51. <i>Latin American and Caribbean Workshop on Mathematics and Gender</i> , BIRS.	May 2022
50. <i>Mirror symmetry in Latin America</i> , (Online).	July 2021
49. <i>OLGA 2021 – Oxford-London Gauge Assembly</i> , (Online) Oxford, UK.	June 2021
48. <i>Women at the intersection of math and theoretical physics</i> , (Online) Canada.	Feb. 2021
47. <i>XII Festival de Matemática</i> , (online) Argentina.	September 2020
46. <i>Qolloquium: Quivers, Representations, Resolutions</i> , (online) Canada.	June 2020
45. <i>Higgs bundles & related topics</i> , (online) Toronto, Canada.	May 2020
44. <i>Connections for Women: Holomorphic Differentials</i> , MSRI, USA.	August 2019
43. <i>2019 Workshop by Moira Chas</i> , Stony Brook, USA.	June 2019
42. <i>Holomorphic Differentials in Mathematics and Physics</i> , SCGP, USA.	February 2019
41. <i>RTG Workshop on the Geometry and Physics of Higgs bundles III</i> , UIC, USA.	June 2018
40. <i>Southeastern regional mathematical string theory meeting</i> , Duke University, USA.	April 2018
39. <i>The Analysis of Gauge-Theoretic Moduli Spaces</i> , Banff, Canada.	August 2017
38. <i>Harmonic Maps, Higgs Bundles and Integrable Systems</i> , Hannover, Germany.	August 2017
37. <i>GEOQUANT Conference</i> , Jutland, Denmark.	August 2017
36. <i>Topological and Algebraic Advances in QFT</i> , Varese, Italy.	August 2017
35. <i>Gauge theory and special geometry</i> (Special Session, MCA 2017), Canada.	July 2017
34. <i>Workshop on Moduli theory and Derived category</i> , Seoul, South Korea.	June 2017
33. <i>Higgs bundles and related topics</i> , Nice, France.	May 2017

32.	<i>Mirror Symmetry Conference for Young Mathematicians</i> , Ann Arbor, USA.	May 2017
31.	<i>British Isles Graduate Workshop Higgs bundles</i> , Isle of Wight, UK.	April 2017
30.	<i>BUNDLES</i> , TIFR, Mumbai, India.	March 2017
29.	<i>School on Geometry and Physics</i> , Bangalore, India.	March 2017
28.	<i>Fifth Annual Midwest Women in Math. Symp.</i> (WIMS), Indianapolis, USA.	February 2017
27.	<i>Encuentro Rioplatense de Álgebra y Geometría</i> , La Plata, Argentina.	December 2016
26.	<i>Workshop on the Geometry and Physics of Higgs bundles I</i> , Chicago, USA.	October 2016
25.	<i>Hitchin 70's birthday conference</i> , Madrid, Spain.	September 2016
24.	<i>New Perspectives on Moduli Spaces in Gauge Theory</i> , NUS, Singapore.	August 2016
23.	<i>Rep. Theory, Integrable Systems and QFT</i> , Northwestern University, USA.	April 2016
22.	<i>Higgs Bundles in Geometry and Physics</i> , University of Heidelberg, Germany.	February 2016
21.	<i>Higgs bundles and Hitchin system</i> , Centre Bernoulli, Switzerland.	January 2016
20.	<i>Workshop on Holomorphic differentials</i> , Cape Town, South Africa.	January 2016
19.	<i>50 years of the Narasimhan–Seshadri Theorem</i> , Chennai, India.	October 2015
18.	<i>Spectral data for Higgs bundles</i> , AIM, San Jose, USA.	August 2015
17.	<i>String Mathematics workshop</i> , Harvard University, USA.	August 2015
16.	<i>Differentialgeometrie im Großen</i> , Oberwolfach, Germany.	July 2015
15.	<i>2015 Joint International Meeting with the AMS</i> , Porto, Portugal.	June 2015
14.	<i>Langlands workshop</i> , UIUC, USA.	November 2014
13.	<i>Geometric structures and representation varieties</i> , SNU Seoul, Korea.	November 2014
12.	<i>Modern trends in Gromov-Witten theory</i> , Hannover, Germany.	September 2014
11.	<i>Workshop on the moduli space of Higgs bundles</i> , NUS, Singapore.	July 2014
10.	<i>Workshop on the Geometry and Physics of Moduli Spaces</i> , Miraflores, Spain.	June 2014
9.	<i>Character Varieties & Geometric Structures</i> , Howard University, USA.	December 2013
8.	<i>9th International ISAAC Congress</i> , Krakow, Poland.	August 2013
7.	<i>Topology of moduli spaces of representations</i> , Miraflores, Spain.	March 2013
6.	<i>Workshop on Geometry of Surface Group Representations</i> , CRM, Spain.	May 2012

SEMINARS
SINCE 2015
(22 BEFORE THEN)

67.	<i>Algebraic Geometry seminar</i> UGA, USA	Spring 2025
66.	<i>Department seminar</i> , De Paul University, USA	Spring 2025
65.	<i>Tacos seminar</i> , Loyola University, USA	Spring 2025
64.	<i>Geometry seminar</i> , RIMS, Kyoto, Japan	May 2024
63.	<i>Algebra, Geometry and Number Theory seminar</i> , Bath, UK	May 2023
62.	<i>COW day</i> , London, UK	May 2023
61.	<i>Centre for Topological Data Analysis weekly meeting</i> , Oxford, UK	January 2023
60.	<i>De La Plata por el Mundo</i> , (Online) La Plata, Argentina	March 2022
59.	<i>ZAG seminar</i> , (Online).	December 2021
58.	<i>Geometric analysis seminar</i> , (Online) Rutgers, USA.	October 2021
57.	<i>Mathematical Physics seminar</i> , (Online) Perimeter Institute, Canada.	October 2021
56.	<i>Geometry Seminar</i> , (Online) Lisbon, Portugal.	April 2021
55.	<i>LAGOON: Leicester Algebra and Geometry Open ONline Seminar</i> , (Online) UK.	July 2020
54.	<i>Algebraic geometry seminar</i> , Stony Brook University, USA.	May 2019
53.	<i>Geometry and Physics</i> , Rutgers New Brunswick, USA.	April 2019
52.	<i>Algebraic geometry seminar</i> , Imperial College, UK.	November 2018
51.	<i>Algebraic geometry seminar</i> , University of Oxford, UK.	November 2018
50.	<i>String Theory Seminar</i> , University of Oxford, UK.	October 2018
49.	<i>Mathematical seminar/interview</i> , University of Oxford, UK.	May 2018

48. <i>Séminaire de Géométrie et Quantification</i> , Institut Henri Poincaré, France.	May 2018
47. <i>Geometry seminar</i> , University College London/King's College London, UK.	April 2018
46. <i>DAMPT & DPMMS seminar/interview</i> , University of Cambridge, UK	March 2018
45. <i>Max Dehn Seminar</i> , University of Utah, USA	January 2018
44. <i>GEAR seminar</i> , University of Illinois at Urbana Champaign, USA.	November 2017
43. <i>Felix Klein seminar</i> , University of Notre Dame, USA.	November 2017
42. ($\times 2$) <i>Geometry Seminar</i> , ITS, Vienna, Austria.	October 2017
41. <i>Mathematical Physics Seminar</i> , University of Heidelberg, Germany.	October 2017
40. <i>Higher Differential Geometry seminar</i> , MPI, Bonn, Germany.	Oct. 2017
39. <i>Algebraic Geometry Seminar</i> , FU Berlin, Germany.	July 2017
38. <i>Mathematical Physics Seminar</i> , IPMU, Japan.	June 2017
37. <i>Topology Seminar</i> , Northwestern University, USA.	May 2017
36. <i>Mathematical Physics Seminar</i> , IMPA, Rio de Janeiro, Brazil.	February 2017
35. <i>Geometric Analysis Seminar</i> , University of Chicago, USA.	January 2017
34. <i>Mathematical Physics Seminar</i> , Perdue University, West Lafayette, USA.	January 2017
33. <i>Algebraic Geometry Seminar</i> , University of Chicago, USA.	January 2017
32. <i>Geometry and Physics Seminar</i> ($\times 2$), Northwestern University,	Spring 2017
31. <i>Algebraic Geometry Seminar</i> , U. of Buenos Aires, Argentina.	June 2012, May 2016
30. <i>Geometry Seminar</i> , University of Texas at Austin, USA.	April 2016
29. <i>Geometry and Analysis Seminar</i> , University of Oxford, UK.	January 2016
28. ($\times 2$) <i>Geometry seminar</i> , EPFL, Lausanne, Switzerland.	June 2015
27. <i>Geometry, Topology and Analysis seminar</i> , University of Sydney, Australia.	May 2015
26. <i>Differential Geometry Seminar</i> , Harvard University, USA.	March 2015
25. <i>Geometry Seminar</i> , UNC at Chapel Hill, USA.	January 2015
24. <i>Geometry Seminar</i> , University of Minnesota, Minneapolis, USA.	January 2015

SELECTED RESEARCH VISITS

7. Mathematical Institute, University of Oxford, UK. (3 +6 months)	2018, 2023
6. IHP, Paris, France (1+1+1.5 (<i>Research in pairs</i>) months)	2012, 2016, 2023
5. Mathematical Sciences Research Institute (MSRI), Berkeley, USA (6+6 months)	2019, 2022
4. Freie Universität Berlin, Germany. (2 +5 months)	2017, 2019
3. Simons Center for Geometry and Physics, Stony Brook, USA. (5 months)	2019
2. IMPA, Rio de Janeiro, Brazil. (4.5 months)	2006, 2008, 2017
1. National University of Singapore, Singapore. (2.5 months)	2013, 2014, 2016

EDITORIAL BOARDS

• Editorial Board Member , Notices, <i>American Mathematics Society</i> .	since 2023
• Editorial Board Member , Scientific Reports, <i>Nature Portfolio</i> .	since 2023
• Editorial Board Member , Geometriae Dedicata, <i>Springer</i> .	since 2019
• Guest Editor . SIGMA special issue " <i>Geometry and Physics of Hitchin systems</i> ".	2017-2019
• Editorial Board . New Collection, University of Oxford, ISSN : 1757-2541.	2010-2011

UNIVERSITY AND DEPARTMENT SERVICE AT UIC

• Senator in the <i>UIC Senate</i> .	2020-2023
• Fellow of the <i>Honors college</i> at UIC.	since 2020
• <i>Co-Organiser</i> , <i>Geometry, Topology and Dynamics seminar</i> .	since 2016

	<ul style="list-style-type: none"> • Research Assistant Professor Search Committee ($\times 5$). 2015-2020 • Admissions, Fellowships, Assistantships committee ($\times 5$) 2015-2019, 2021 • Salary ($\times 1$); Visitor ($\times 2$); Faculty Search ($\times 1$); Mathematics Club ($\times 1$) . 2017-2018
OTHER SELECTED PROFESSIONAL SERVICE ACTIVITIES	<hr/> <ul style="list-style-type: none"> • Luxembourg national research fund (FNR), external reviewer. 2024 • Alexander von Humboldt Foundation, external reviewer. <i>since</i> 2020 • National Science Centre, Poland, proposal reviewer. 2020 • Behavioural Science Referee: J. of Med.Int.Res.; Open Psy.J.; <i>since</i> 2020 • NSF Reviewer ($\times 6$). 2016, 2017, 2019, 2021, 2022, 2024 • MathSciNet Reviewer (accept duties ~ 2 times per year). <i>since</i> 2014 • Mathematics Journal Referee (~ 5 times per year for over 20 journals). <i>since</i> 2012 <hr/>
UNIVERSITY LARGE CLASS TEACHING	University Instructor , University of Illinois at Chicago, USA <ul style="list-style-type: none"> • Math 596: Independent study. ($\times 6$) (<i>graduate course</i>) Fall '15, '16, '17 & Spring '17 • Math 549: Differentiable Manifolds I. ($\times 2$) (<i>graduate course</i>) Fall '15 & Spring '17 • Math 547: Algebraic Topology I. ($\times 1$) (<i>graduate course</i>) Fall '16 • Math 494: Mathematics in Society. ($\times 1$) (<i>graduate and undergraduate course</i>) Fall '24 • Math 300: Writing for Mathematics. ($\times 28$) Spring '20, '22, '24 & Fall '20, '21, '23, '24 • Math 215: Introduction to advanced mathematics. ($\times 4$) Fall '15, '16 & Spring '18 University Instructor , University of Illinois at Urbana-Champaign, USA <ul style="list-style-type: none"> • Math 348: Fundamental Mathematics and writing. ($\times 4$) 2013-2015 • Math 347: Fundamental Mathematics. ($\times 2$) 2013-2015 <hr/>
2 TO 1 TEACHING	College lectureship , University of Oxford, UK. 2010-2012 <ul style="list-style-type: none"> • <i>3D Calculus; Calculus of Variations; Linear Algebra I,II; Groups, Rings and Fields.</i> <hr/>
TEACHING ASSISTANTSHIPS	Class Tutor , Mathematical Institute, Oxford, UK. 2010 <ul style="list-style-type: none"> • <i>B9. Algebraic Number Theory</i> (& Revision Classes). Teaching Assistant , Mathematical Institute, University of Oxford. 2009-2010 <ul style="list-style-type: none"> • <i>B9. Algebraic Number Theory; B3. Geometry of Surfaces; C9.1 Elliptic Curves.</i> Teaching Assistant , National University of La Plata, Argentina. 2006-2008 <ul style="list-style-type: none"> • <i>Analysis</i> (Mathematics dept.); <i>Probabilities and Statistics</i> (Engineering dept.). <hr/>
INTERNATIONAL PROGRAMS & HIGH SCHOOL TEACHING	<ul style="list-style-type: none"> • GEC Tutor 2023 • OPUS Tutor & WISC Tutor, University of Oxford Programs. 2010-2012 • CIE Tutor & Summer Lecturer, Center for International Education, Oxford. 2009-2011 • Junior Lecturer, Colegio Nacional Rafael Hernandez (High School) Argentina. 2007 • Tutor and Mentor online, Tutor.com, New York City, US. (through Latinhire). 2005-2008 <hr/>
OUTREACH ACTIVITIES	<ul style="list-style-type: none"> • Book Reading: <i>Abraham Lincoln Elementary School</i>, Chicago, USA. December 2024 • Book Reading: <i>Guidepost Montessori Lincoln Park</i>, Chicago, USA. November 2024 • Book Reading: <i>Lincoln Park Zoo</i>, Chicago, USA. October 4 & 18 2024 • Career Day Presenter: <i>Abraham Lincoln Elementary School</i>, Chicago, USA. April 2024 • Field Trip Officer: <i>Abraham Lincoln Elementary School</i>, Chicago, USA. <i>since</i> 2023

- **Speaker:** *Science and Society*, Colegio Nacional Rafael Hernandez, Argentina. August 2023
- **Book Reading:** *Oxford's council library*, Oxford, UK. May 2023
- **Organizer:** *Tadashi Tokieda's magic show*, New College, Oxford, UK. June 2023
- **Book Reading:** *Somerville Nursery*, Somerville College, University of Oxford, UK. May 2023
- **Organizer:** *Poetry evening with Ian Whybrow*, All Souls college, Oxford, UK. May 2023
- **Book Reading:** *New College School*, Reception Class Book reading, Oxford, UK. April 2023
- **Panelist:** *Want more women in STEMM? Educate them Early!*, Oxford, UK. March 2023
- **Speaker:** *It All Adds Up*, University of Oxford, UK. January 2023
- **Speaker:** *Undergraduate summer workshop*, (career talk) Notre Dame, USA. August 2022
- **Panelist:** *NSF REU Women in Science and Technology panel*, DePaul U., USA. July 2022
- **Speaker:** *Harvard-MIT Math Tournament*, (career talk) HMMT, USA. November 2021
- **Reader:** *Guidepost Montessori*, Nido & Toddler room Book reading. July & June 2021
- **Speaker:** *UIC AWM Chapter, Stanford Math Organization, New College Oxford* 2021
- **Speaker:** *Stanford Women in Math Mentoring, UChicago Women in STEM club* 2021
- **Co-Organizer** (w. James Unwin): *SIDE MATH 2020* 2020
- **Co-Organizer** (w. James Unwin): *1st, 2nd, 3rd, 4th, 5th Sonia day at UIC*, 2015-2019
- **Connections for Women Panelist**, MSRI, Berkeley, USA. 2019
- **Volunteer:** *Sonia Maths day for Girls and UIUC GEMS program* 2013-2015
- **Co-Organizer** (with Jayadev Athreya et al.) *MoSAIC Festival*, UIUC. 2014
- **Panel speaker:** *Graduate College Career Development*, UIUC, USA 2014
- **Teacher:** *Urbana High School & Garden Hills Elementary School*. 2013

ADDITIONAL EXPERIENCE

- **Spanish:** *Native*; **English and French:** *Fluent*; **German:** *A2*
- **Choir Singer**, *Oratorio Society*, UIUC, USA. 2013-2015
- **Treasurer**, *Middle Common Room, New College*, University of Oxford. 2010-2011
- **Conference Assistant**, and **IT Assistant**, *New College*, University of Oxford. 2010-2011

IN THE MEDIA

- (×2) *About projects I mentored.* *Science*, *Business Wire*, *Kusi News*. 2017-2024
- (×4) *About Children Books*
AMS Notices (x2), *Illinois Conn.*; *Block Club Chicago* ; *UIC Today*. 2021-2023
- (× 5) *About math life / women in math / activities* 2019-2022
UIC Today; *Wiaarkhu Magazine*; *Interview for "2020 Lathisms"*;
Interview about organizing workshops at MFO, LaPlata1.com.
- (× 5) *About Gossip spread* – A trust model for spreading of gossip, with Bhansali. 2019
ZAP.aeiou; *UIC News*; *Phys.org*; *Tech Explorist*; *NewsWise*.
- (×14) *About Phone-Walkers* – behavioural study done with James Unwin. 2018
The Atlantic; *The Chicago Tribune*; *The Süddeutsche Zeitung*; *The Times of India*;
MIT Tech. Rev.; *Cronica Global* ; *The Week*; *Co-Design*; *UIC LAS*; *Workplace Insight*; *Nextbigwhat*; *Xuehua*; *Marketingoops - Thailand*; *Cromo - Uruguay*.
- (× 3) *Sonia Kovalevsky Days* – with J. Unwin. 2016-2019
AWM Newsletter, 49 (5); *UIC News*; *AWM Newsletter*, 46 (6).
- (× 1) *About Humboldt Fellowship* – awards to J. Unwin and myself. *UIC Today*. 2017
- (× 2) *About workshops co-organized.* *SCGP News*; *AIMatters 2016*. 2016
- (× 3) *About being top undergraduate student.* *La Nación*, *Clarín*, *El Día*. 2009

IN PROGRESS (* = STUDENT)	61. <i>Minimal surfaces and orthogonal Higgs bundles</i> , with Ian McIntosh.	
	60. <i>A Mathematical Study of Glioblastoma using Compucell3D</i> , with Ashna Dagam*	
	59. <i>Branes and bi-lagrangians</i> , with Ruxandra Moraru.	
MATHEMATICS VOLUMES & BOOKS	58. Advances in Complex Lagrangians, Integrable systems and Quantization , Co-edited with Mulase, Dumitrescu, Sawon. Contract signed with WorldScientific.	to appear
	57. Lectures on Complex Lagrangians, Integrable systems and Quantization , Co-edited with Mengxue Yang. Contract signed with WorldScientific.	to appear
	56. Writing for Mathematics , ISBN 979-8-7814575-9-5.	2021
	55. Geometry and Physics of Hitchin Systems , edited with Lara B. Anderson	2019
	Symmetry, Integrability and Geometry: Methods and Applications (SIGMA) .	
	54. Geometry and Physics of Higgs Bundles , edited with Anderson, Hausel, Mazzeo	2019
PREPRINTS (* = STUDENT)	Oberwolfach Reports, Vol. 16, N. 2, 2019, pp. 1357–1417 DOI: 10.4171/OWR/2019/23	
	53. <i>A Study of the Creation of Safe Zones Using Link Removal in Epidemiology</i> , with Gabriela Ravenna, Ashna Dagam* and Sanjay Dagam*.	2024
	52. <i>CAACS: A Carbon Aware Ant Colony System</i> , with Marina Lin*. arXiv:2407.09404 (submitted)	2024
	51. <i>Influencer Identification on Link Predicted Graphs</i> , with Raina Wu*. ArXiv:2402.07505 (submitted)	2024
	50. <i>Animal Synchrony and agents' segregation</i> , with Robin I.M. Dunbar and Sheryl Hsu*. ArXiv:2212.07505 (submitted)	2023
PUBLICATIONS (* = STUDENT)	49. <i>How AI is Shaping Everyday Research</i> with Lara Anderson, Steven Bradlow, Yang-Hie He and Maximilian J. Telford. Notices of the AMS (To appear in May issue).	2025
	48. <i>Real slices of $SL(r, \mathbb{C})$ opers</i> , with Indranil Biswas and Sebastian Heller. SIGMA , 19 (2023), 067, 23 pages.	2023
	47. <i>Understanding Zillow's dataset via stock market indicators</i> , with Varun Mittal*. Heliyon (Finance Special Issue) , Cell Press, Volume 9, Issue 5, 2023.	2023
	46. <i>Correlations between COVID-19 and Dengue</i> , with Paula Bergero and Grace Wang*. Nature Scientific Reports , volume 13, 1525 (2023).	2023
	45. <i>Focus on a Scientist: Rafe Mazzeo</i> , with Laura Fredrickson Emissary , MSRI Fall 2022.	2022
	44. <i>Generalized Hyperpolygons and applications</i> , ZAG's Handbook of MAG , CRC press.	2022
	43. <i>The Power of Many: A Physarum Swarm Steiner Tree Algorithm</i> , with Sheryl Hsu* and Fidel I. Schaposnik Massolo. Nature Scientific Reports , volume 12, 14536 (2022).	2022
	42. <i>Cell fusion through slime mold network dynamics</i> , with Sheryl Hsu*. Journal of the Royal Society Interface , J. R. Soc. Interface 19: 20220054.	2022
	41. <i>Triality for homogeneous polynomials</i> , with Sebastian Schulz*. SIGMA , 17 (2021), 079, 14 pages.	2021
	40. <i>Branes and moduli spaces of Higgs bundles on smooth projective varieties</i> . with Indranil Biswas and Sebastian Heller. Research in the Mathematical Science , Vol. 8, No. 52 (2021)	2021
	39. <i>A modified age-structured SIR model for COVID-19 type viruses</i> , with Vishaal Ram*. Nature Scientific Reports , 11, 15194 (2021).	2021
	38. <i>On the generalized $SO(2n, \mathbb{C})$-opers</i> , with Indranil Biswas and Mengxue Yang*. Annals of Global Analysis and Geometry , 60, pages 539 – 557 (2021)	2021
	37. <i>Advanced topics in gauge theory: geometry and physics of Higgs bundles</i> . Park City Mathematics Series , Volume 28, pp. 201-252, 2021.	2021

36. *Entendiendo la P y el Intervalo de confianza 95*, w/ Paula Caporal & Daniela Bozzacchi. 2021
Editorial Médica Panamericana, PROTIPE, pp.75-90; ISSN: 2362-3942.
35. *What is... a hyperpolygon*, with Steve Rayan. 2021
Notices of the AMS, Vol. 68, N. 1, January 2021.
34. *Moduli spaces of generalized hyperpolygons*, with Steve Rayan. 2021
The Quarterly Journal of Mathematics, Vol 72 (2021), 1–25;.
33. *Extrapolating continuous color emotions through deep learning*, with Vishaal Ram*, 2020
and Konstantinou, Volkan, Papadatou-Pastou, Manav, Jonauskaitė, Mohr.
Physical Review Research, Vol. 2, No. 3, (2020).
32. *Orthogonal Higgs bundles with singular spectral curves*, with Bradlow and Branco*. 2020
Communications in Analysis and Geometry, Vol. 28, N. 8, 1895–1931, 2020.
31. *Generalized B-operators*, with Indranil Biswas and Mengxue Yang*. 2020
SIGMA 16 (2020), 041, 28 pages.
30. *Minimal percolating sets for mutating infectious diseases*, with Yuyuan Luo*. 2020
Physical Review Research, Vol. 2, No. 2 (2020).
29. *Higgs bundles without geometry*, with Steve Rayan. 2020
Snapshots of modern mathematics, DOI 10.14760/SNAP-2020-008-EN.
28. *Higgs bundles – recent applications*, 2020
Notices of the AMS, Vol. 67 No. 5 (May 2020)
27. *A trust model for bootstrap percolation*, with Rinni Bhansali*. 2020
Proc. R. Soc. A 476: 20190826 (2020).
26. *Cayley and Langlands type correspondences for orthogonal Higgs bundles*, 2019
with David Baraglia. **Transactions of the AMS**, Vol. 371, Num. 10 (2019) 41 pages.
25. *A geometric approach to orthogonal Higgs bundles*, 2018
European Journal of Mathematics, Vol. 4, Num. 4, pp 1390-1411 (2018).
24. *Singular geometry and Higgs bundles in string theory*, 2018
with L. B. Anderson, M. Esole and L. Fredrickson.
SIGMA, 14 (2018), 037, 27 pages
23. *Branes through finite group actions*, with Sebastian Heller. 2018
Journal of Geometry and Physics, Vol. 129 (2018) 279-293.
22. *Brauer group of Moduli of Higgs bundles and connections*, with Baraglia and Biswas. 2018
A Festschrift in Honour of Nigel Hitchin, Vol. 2, Oxford University Press.
21. *Modeling epidemics on d-cliqued graphs*, with Anlin Zhang*. 2018
Letters in Biomathematics, Volume 5, Number 1 (2018), p. 49-69.
20. *The phone walkers: A study of human dependance on inactive mobile devices*, 2018
with James Unwin. **Behaviour**, (2018) Volume 155, Issue 5, p. 389 - 414.
19. *On the geometry of regular icosahedral capsids containing disymmetrons*, with K-S. Ang*. 2017
Journal of Structural Biology, Volume 197, Issue 3 (2017), p. 340-349.
18. *T-Branes at Limits of Geometry*, with L.B. Anderson, J.J. Heckman, and S. Katz. 2017
J. High Energ. Phys. (2017) 2017: 58.
17. *An introduction to spectral data for Higgs bundles* 2017
Lecture Note Series, IMS LNS Vol 65 (2017), 38 pages.
16. *Monodromy of rank 2 twisted Hitchin systems and real character varieties*, 2017
with David Baraglia. **Transactions of the AMS**, Vol. 370, Num. 8, (2018).
15. *Automorphisms of \mathbb{C}^* moduli spaces associated to a Riemann surface*, 2016
with David Baraglia and Indranil Biswas. **SIGMA** 12 (2016), 007, 14 pages.
14. *Higgs bundles and exceptional isogenies*, with Steve Bradlow. 2016
Res. Math. Sci. (2016) 3:14 DOI 10.1186/s40687-016-0062-0.
13. *Interface control and snow crystal growth*, with Jessica Li*. 2016
Phys. Rev. E, 93, 023302, 2016.
12. *Real structures on moduli spaces of Higgs bundles*, with David Baraglia. 2016
Adv. Theor. Math. Phys., Vol. 20, N. 3 (2016), 525-551.

	11. <i>Higgs bundles and applications</i> . Oberwolfach Reports , Report No. 31 (2015), 31-33.	2015
	10. <i>Spectral data for $U(m, m)$-Higgs bundles</i> . Int. Math. Res. Notices , Vol. 2015 no. 11.	2015
	9. <i>Nonabelianization of Higgs bundles</i> , with Nigel Hitchin. J. Differential Geom. Volume 97, Number 1 (2014), 79-89.	2014
	8. <i>Higgs bundles and (A, B, A)-branes</i> , with David Baraglia. Communications in Mathematical Physics , Vol. 331 No. 3.	2014
	7. <i>Spectral data for G-Higgs bundles</i> . DPhil Thesis , University of Oxford, 170 p.	2013
	6. <i>Monodromy of the SL_2 Hitchin fibration</i> . Int. J. Math. Vol. 24, 1350013 (2013)	2013
POPULAR PRESS ARTICLES	5. <i>Working from Home. 4 Months and Still Counting</i> , with A. Frabetti, V. Salnikov EMS Newsletter , 9 (117), 38-41, September 2020.	2020
	4. <i>Mathematics in the sea</i> , with James Unwin. AWM Newsletter , Vol.49, No.6.	2019
	3. <i>Sonia Kovalevsky Days, the potential to inspire</i> , with James Unwin. AWM Newsletter . Vol.49, No.5.	2019
	2. <i>Bridges between worlds, from past to present</i> . AIMatters 2016 , Newsletter of the American Institute of Mathematics.	2016
	1. <i>Sonia Kovalevsky Days in Chicago</i> , with J. Unwin. AWM Newsletter , Vol. 46, No.6.	2016
CHILDREN BOOKS	15. Puedo Leer con Paco: La Pluma , ISBN 978-1-963787-09-2	2024
	14. Puedo Leer con Paco: El Mar , ISBN 978-1-963787-02-3	2024
	13. Puedo Leer con Paco: El Bosque , ISBN 978-1-963787-01-6	2024
	12. Puedo Leer con Paco: La Playa , ISBN 979-1-9637870-0-9	2024
	11. Puedo Leer con Paco: El Circo , ISBN 979-8-9859682-9-3	2024
	10. Puedo Leer con Paco: El Museo , ISBN 978-1-9637879-9-3	2024
	9. Puedo Leer con Paco: La Luna , ISBN 979-8-9859682-7-9	2024
	8. Puedo Leer con Paco: El Auto , ISBN 979-8-9859682-8-6	2024
	7. Puedo Leer con Paco: La Nieve , ISBN 979-8-9859682-6-2	2024
	6. Puedo Leer con Paco: La Tormenta , ISBN 979-8-9859682-5-5	2024
	5. Ene and the Magic Steps: a scientific adventure , ISBN: 978-1-7370584-4-1, with Cecilia La Rosa (Illustrator).	2023
	4. The potential to inspire: Sonia Kovalevsky's journey to become a scientist . ISBN: 979-8-9859682-2-4.	2023
	3. Roku Raccoon's difficult day , ISBN: 979-8-9859682-4-8, with Martina Peškar-Rusznák (Illustrator).	2023
	2. Ene and the Magic Tree: a mathematical adventure , ISBN: 978-17370584-1-0, with Cecilia La Rosa (Illustrator).	2021
	1. Ene and the Magic Boxes: an odyssey through the world of artisans , ISBN: 978-17370584-5-8, with Cecilia La Rosa (Illustrator).	2021