Laura P. Schaposnik M. (June 17, 2023)

Personal Information	Department of Mathematics, University of Illinois, Chicago, IL 60607, USA	Born: 20 July, 1985 in La Plata, Argentin Email: lauraschaposnik@gmail.com https://schapos.people.uic.edu	na
EMPLOYMENT	Professor, University of Illinois at Chicag	o, USA.	$since\ 2022$
	Associate Professor, University of Illino	is at Chicago, USA.	2018-2022
	Assistant Professor, University of Illinoi	s at Chicago, USA.	2015-2018
	L.Doob. Research Assistant Prof., Unit	versity of Illinois at Urbana-Champaign, U	SA. 2013-2015
	${\bf Wissenschaftlicher\ Assistent},\ {\bf Heidelbe}$	rg University, Heidelberg, Germany	2012-2013
	Stipendiary Lecturer in Mathematics	s, Trinity & Magdalen College, Oxford, UK	2011-2012
	Retained Lecturer in Mathematics, H	lertford College, Oxford, UK.	2010-2011
	${\bf Tutor\ in\ Mathematics},\ {\rm New\ College},\ {\rm St}$. Peter's College, Lincoln College.	2009-2011
EDUCATION	University of Oxford. New College, Oxford. New College, Oxford. D.Phil. in Mathematics, Advisor: Prof. Ni		2008-2013
	National University of La Plata. La Plata. La Plata. La Plata. en Matematica (MMath equiv.). Grad		2004-2008
	Conservatory Gilardo Gilardi. Music	Conservatory, La Plata, Argentina.	2003-2007
VISITING POSITIONS	9. Visiting Fellow, All Souls College, Un	niversity of Oxford, UK.	Spring 2023
	8. Visiting professor, Mathematical Inst	citute, University of Oxford, UK.	Spring 2023
	7. Research Professor, Mathematical Sc	iences Research Institute, USA.	Fall 2022
	6. Research Member, Mathematical Science	ences Research Institute, USA.	Fall 2019
	5. Alexander von Humboldt fellow, Frei	e Universität Berlin, Germany.	Summer 2019
	4. Visiting Associate Professor, Simons	Center for Geometry and Physics, USA.	Spring 2019
	3. Visiting Fellow, New College, University	sity of Oxford, UK.	Fall 2018
	2. Visiting professor, Mathematical Inst	citute, University of Oxford, UK.	Fall 2018
	1. Alexander von Humboldt Fellow, Fre	· · · · · · · · · · · · · · · · · · ·	Fall 2017
SELECTED	11. NSF FRG Award DMS 2152107	7 (PI, w/ Mulase, Sawon, Dumitrescu).	2022-2025
Grants and fellowships	10. NSF RTG: Algebra, Geometry, (Key Personnel, w/ (PI) Coskun et.		2021-2026
SINCE 2015	9. Simons Fellowship.	,	2022-2023
	8. <i>Mottez fellowship</i> , IHP Paris, Fran	nce.	2023
		ickson, Mazzeo, Mrowka, (PI) Walpuski).	2022
	6. NSF CAREER Award DMS 172		2018-2023
	5. NSF Conference Award – "Unit 4. NSF DMS 1929915 (PI, w/ L. Ar	· /	2021 2019
		nderson). 1d Physics Semester, (PI, w/ L. Anders	
	2. Alexander von Humboldt Fellow		2017-2019
	1. NSF DMS 1509693 and DMS 1	- ' ' '	2015-2019
MEMBERSHIPS	10. Fellow of UIC Honors College.		since 2021
	9. Member of the American Mathema		$since\ 2017$
	8. Member of the Unión Matemática	Argentina (UMA).	$since\ 2017$

	 Faculty mentor for PRIMES-MIT, Massachusetts Institute of Technology. Member of the AWM Gweneth Humphreys Award Selection Committee Member of the Hitchin-Ngo Lab. ICMAT, Madrid, Spain Member of the AWM Joan & Joseph Birman Prize Committee. Co-Chair of the AMS Joint Committee on Women in Maths. (JCW). 	since 2015 since 2014 2022-2025 2021-2023 2019-2023 2017-2018 2015-2018
Supervision of PhD Students		ected 2025 uary 2022
PHD AND MASTER THESIS COMMITTEES	 Fabiola Cordero, PUC-Rio, Brazil. Juan Sebastián Numpaque, Universidad de los Andes, Colombia. Keaton Quinn and Charles Alley, University of Illinois at Chicago, USA. Thesis reviewer, Roma Tre University, Italy 	2021 2021 2019-2020 2019
SUPERVISION OF RESEARCH PROJECTS	 Ashna Dagam, Wisconsin independent research student. Sharis Hsu, West coast independent research student. Raina Wu, Supervised through MIT PRIMES-USA. Varun Mittal, Chicagoland High school student. (joining UIUC?). Grace Wang, Supervised through MIT PRIMES-USA (joining MIT). Sheryl Hsu, Supervised through MIT PRIMES-USA (now at Stanford). Regeneron Science Scholar 2021; JMM MAA Undergraduate Poster Session present Vishaal Ram, Supervised through MIT PRIMES-USA (now at MIT). Regeneron Science Scholar 2020; 2020 ST. Yau High School Science Bronze Award Yuyuan Luo, Supervised through MIT PRIMES-USA (now at MIT). JMM Outstanding Poster Presentation Award. Rinni Bhansali, Supervised through MIT PRIMES-USA (now at Stanford). Regeneron Scholar 2019JHSH National Finalist 2019; JMM MAA session speaker. Rachana Madhukara, Kevin Ren, Anlin Zhang (High School, California). Group National Finalist in the 2017 Siemens Competition. Anlin Shang, Supervised through MIT PRIMES-USA (now at Princeton). Kai-Siang Ang, Supervised through MIT PRIMES-USA (now at Stanford). Regeneron Science Talent Search Scholar 2017. Jessica Li, Supervised through IGL and MIT PRIMES-USA (now at Harvard). Semifinalist in the 2014 Siemens Competition and Intel Competition (among others) 	2020 2019 2018 2017 2017 2016 2014
Awards and Grants 2014 - present (~ US\$ 3.2M)	 Mottez fellowship, IHP Paris, France. Krainz Foundation Research Award, PI (US\$10k). London Mathematics Society Conference grant, PI. Heilbronn Conference grant, PI. BIRS Conference grant, PI, w/ Anderson, Rayan and Schafer-Nameki. BIRS Conference grant, co-PI, w/ Dumitrescu, Failde, Morales and PI Mulase. IHP: Research in Pairs (with Steven Rayan and Emanuele Macri) 	2014 2022-2025 2015-2025 2023 2023 2023 2023 2023 2023 2023 2023 2023 2023

18. NSF CAREER Award DMS 1749013: (PI) (US\$ 400k).	2018-2023
17. <i>UIC Visitor's fund award</i> (To host 7 visitors), (US\$10k).	2018-2020
16. NSF DMS 1929915 (PI, L. Anderson Co-PI) (US\$ 9k).	2019
15. Simons Center for Geometry and Physics (~US\$ 300k),	2019
14. $SCGP$, Conference Grants (PI w/ L. Anderson, US\$ 35k \times 2).	2019
13. Oberwolfach Conference grant (PI, w/ Anderon, Hausel and Mazzeo)	2019
12. Alexander von Humboldt Fellowship (US\$ 40k)	2017-2019
11. NSF Research grant DMS 1509693 and DMS 1611835 (PI) (US\$ 144k)	2015-2019
10. <i>UIC Research Award</i> , through UFRP program (US\$ 30k).	2015-2018
9. <i>Conference grant</i> via NSF RTG grant DMS-1246844 (PI: L. Ein). (US\$ 45k)	2016-2018
8. UIUC Math Department Conference grant (US\$ 5k).	2017
7. NSF Conference grants through GEAR Network (PI), (US\$ 90k).	2015 - 2017
6. American Institute of Mathematics (PI), Conference Grant (US\$ 35k x2).	2015 - 2017
5. Long & Short visit grants via GEAR Network (US\$ 30k),	2014-2017
4. SCGP (PI w/Anderson), Conference Grant (US\$ 30k).	2016
3. <i>IHP trimester participant support</i> (×2), Institut Henri Poincaré (US\$ 4k)	2012-2016
2. AMS Simons Travel Grant (US\$ 4k)	2014-2015
1. Public Engagement Grant, UIUC w./ Delcourt (PI) & Kedem.	2014-2015
5. European Science Foundation short visit Grant via "ITGP".	2012-2013
4. QGM 6 months research grant, QGM, Aarhus and Oxford.	2012
3. Clarendon Award and New College Scholarship.	2008-2011
2. National Government and Santander Bank and Joaquín V González Pr	<i>rize</i> . 2009
1. Argentinian Mathematical Olympiads, 3rd place, w/R . Lafuente $(\times 2)$	2007-08

SELECTED UNDERGRADUATE & GRADUATE PRIZES, AWARDS, AND GRANTS 2006-2013

INTERNATIONAL MEETINGS ORGANIZED

- 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.

 MSRI: "Connections for Women Woorkshop", Berkeley, USA
- 34. Co-Organizer, with Brian Collier

 UIC: "Geometric structures (re)United", UIC, USA.

 June 2022
- 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.

August 2022

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.
- 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
 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.
- 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.

 UIC: "RTG Workshop on the geometry and physics of Higgs bundles III".

 June 2018
- 5. Organizer, Graduate students' workshop. UIC, USA.

 VIC: "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'.

MEETINGS ORGANIZED FOR GRADUATE STUDENTS AND POST-DOCS

	2. Organizer , Graduate students' workshop. UIC, USA. UIC: "RTG Workshop on the geometry and physics of Higgs bundles I"	October 2016
	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	12. Universidad Nacional de La Plata, La Plata, Argentina. 3 Hrs - Lectures on percolation theory.	April 2023
	11. University of Oxford, Oxford, UK. 3 Hrs - Masterclass on knot theory.	March 2023
	10. Universidad Nacional de La Plata, La Plata, Argentina. 3 Hrs - Lectures on knot theory.	November 2022
	9. Undergraduate geometry & topology workshop, Notre Dame, USA. 3 Hrs - Lectures on knot theory.	August 2022
	8. IAS/Park City Mathematics Institute (PCMI) 2019 Program, Park City, US. 4 Hrs - Lectures on Gauge theories intended for ~ 150 participants.	A. August 2019
	7. Junior GEAR Retreat 2017, Stanford University, USA. 3 Hrs - Lectures on Higgs bundles intended for ~ 100 participants.	August 2017
	6. Summer program for undergraduate women, UBC, Vancouver, Canada. 16 Hrs - Lectures on Knot theory intended for undergraduate students.	August 2016
	5. School on Higgs bundles, ICTS, Bangalore, India. 4 Hrs - Lectures on Higgs bundles intended for graduate students and faculty	March 2016
	4. Pohang Mathematics Institute, Pohang, Korea. 3 Hrs - Lectures on Higgs bundles intended for graduate students and faculty	November 2014
	3. Summer School on the moduli space of Higgs bundles, NUS, Singapore. 2 Hrs - Lectures on Higgs bundles.	July 2014
	 University of California at Davis, California, USA. Hrs - Lectures on Higgs bundles intended for graduate students and faculty 	January 2014
	1. Faculté des Sciences d'Orsay, Université Paris-Sud, France 2 Hrs - Lectures on Higgs bundles intended for undergraduate and graduate	April 2013 students.
Colloquia and	28. All Souls College evening series, Oxford, UK.	January 2023
PLENARY TALKS (*)	27. Heilbronn Annual Meeting *, Bristol, UK.	September 2022
	26. YSP at UIC*, Chicago, USA.	June 2021
	25. Real Sociedad Matemática Española *, Spain (Online).	May 2021
	24. Cibercoloquio Latinoamericano de Matemáticas, Brazil (Online).	April 2021
	23. Unión Matemática Argentina *, Annual meeting, Argentina (online).	September 2020
	22. (×2) University of Illinois at Chicago, USA. March 20	016, March 2020
	21. Rutgers University - Newark Campus, USA.	April 2019
	20. Stony Brook University, Stony Brook, USA.	March 2019
	19. Simons Center for Geometry and Physics, Stony Brook, USA.	February 2019
	18. Iberoamerican Congress on Geometry *, Valladolid, Spain.	January 2018
	17. Northeastern University, Boston, USA.	January 2018
	16. University of Utah, Salt Lake City, USA.	January 2018
	15. University of Washington, Seattle, USA.	January 2018
	14. University of Notre Dame, South Bend, USA.	January 2018

13. Center for Mathematical Physics, Hamburg, Germany.

 $11.\ Indiana\ University-Purdue\ University\ Indiana polis,\ USA.$

12. Universidad Nacional de La Plata, Argentina.

November 2016

June 2017

May 2017

10.	String-Maths 2016 *, Collège de France, Paris, France.	July 2016
9.	† Colorado State niversity, Denver, USA.	February 2015
8.	University of North Carolina at Chapel Hill, USA.	January 2015
7.	University of Boston, Massachusetts, USA.	January 2015
6.	University of Minnesota, Minneapolis, USA.	January 2015
5.	Purdue University, West Lafayette, USA.	December 2014
4.	University of Illinois at Chicago, Chicago, USA.	December 2014
3.	Boston College, Boston, USA.	November 2014
2.	Pohang Mathematics Institute, Pohang, Korea.	November 2014

Conference and Workshop Talks: List since 2012 (5 before that)

2.	Pohang Mathematics Institute, Pohang, Korea.	November 2014
54.	Frontiers in Geometric Analysis, Santa Cruz, USA.	June 2024
53.	General Geometries and Gauge Theory, Miami, USA.	December 2023
52.	Brussels-London Geometry day, London, UK.	April 2023
51.	Analytic and Geometric Aspects of Gauge Theory, MSRI, Berkeley, USA.	August 2022
50.	Latin American and Caribbean Workshop on Mathematics and Gender, BIRS	May 2022
49.	Mirror symmetry in Latin America, (Online).	July 2021
48.	OLGA 2021 - Oxford-London Gauge Assembly, (Online) Oxford, UK.	June 2021
47.	Women at the intersection of math and theoretical physics, (Online) Canada.	Feb. 2021
46.	XII Festival de Matemática, (online) Argentina.	September 2020
45.	Qolloquium: Quivers, Representations, Resolutions, (online) Canada.	June 2020
44.	Higgs bundles & related topics, (online) Toronto, Canada.	May 2020
43.	Connections for Women: Holomorphic Differentials, MSRI, USA.	August 2019
42.	2019 Workshop by Moira Chas, Stony Brook, USA.	June 2019
41.	Holomorphic Differentials in Mathematics and Physics, SCGP, USA.	February 2019
40.	RTG Workshop on the Geometry and Physics of Higgs bundles III, UIC, USA	A. June 2018
39.	Southeastern regional mathematical string theory meeting, Duke University, U	SA. April 2018
	The Analysis of Gauge-Theoretic Moduli Spaces, Banff, Canada.	August 2017
37.	Harmonic Maps, Higgs Bundles and Integrable Systems, Hannover, Germany.	~
36.	GEOQUANT Conference, Jutland, Denmark.	August 2017
	Topological and Algebraic Advances in QFT, Varese, Italy.	August 2017
34.	Gauge theory and special geometry (Special Session, MCA 2017), Canada.	July 2017
33.	Workshop on Moduli theory and Derived category, Seoul, South Korea.	June 2017
	Higgs bundles and related topics, Nice, France.	May 2017
	Mirror Symmetry Conference for Young Mathematicians, Ann Arbor, USA.	May 2017
	British Isles Graduate Workshop Higgs bundles, Isle of Wight, UK.	April 2017
	BUNDLES, TIFR, Mumbai, India.	March 2017
	School on Geometry and Physics, Bangalore, India.	March 2017
	Fifth Annual Midwest Women in Math. Symp. (WIMS), Indianapolis, USA.	February 2017
	Encuentro Rioplatense de Álgebra y Geometría, La Plata, Argentina.	December 2016
	Workshop on the Geometry and Physics of Higgs bundles I, Chicago, USA.	October 2016
	Hitchin 70's birthday conference, Madrid, Spain.	September 2016
	New Perspectives on Moduli Spaces in Gauge Theory, NUS, Singapore.	August 2016
	Rep. Theory, Integrable Systems and QFT, Northwestern University, USA.	April 2016
	Higgs Bundles in Geometry and Physics, University of Heidelberg, Germany.	February 2016
	Higgs bundles and Hitchin system, Centre Bernoulli, Switzerland.	January 2016
	Workshop on Holomorphic differentials, Cape Town, South Africa.	January 2016
	50 years of the Narasimhan–Seshadri Theorem, Chennai, India.	October 2015
17.	Spectral data for Higgs bundles, AIM, San Jose, USA.	August 2015

	 String Mathematics workshop, Harvard University, USA. Differentialgeometrie im Großen, Oberwolfach, Germany. 2015 Joint International Meeting with the AMS, Porto, Portugal. Langlands workshop, UIUC, USA. Geometric structures and representation varieties, SNU Seoul, Korea. Modern trends in Gromov-Witten theory, Hannover, Germany. Workshop on the moduli space of Higgs bundles, NUS, Singapore. Workshop on the Geometry and Physics of Moduli Spaces, Miraflores, Spain Character Varieties & Geometric Structures, Howard University, USA. 9th International ISAAC Congress, Krakow, Poland. 	December 2013 August 2013
	 Topology of moduli spaces of representations, Miraflores, Spain. Workshop on Geometry of Surface Group Representations, CRM, Spain. 	March 2013 May 2012
SEMINARS	62. Algebra, Geometry and Number Theory seminar, Bath, UK	May 2023
SINCE 2015 (22 BEFORE THEN)	61. COW day, London, UK	May 2023
(22 BEFORE THEN)	60. Centre for Topological Data Analysis weekly meeting, Oxford, UK	January 2023
	59. De La Plata por el Mundo, (Online) La Plata, Argentina	March 2022
	58. ZAG seminar, (Online).	December 2021
	57. Geometric analysis seminar, (Online) Rutgers, USA.	October 2021
	56. Mathematical Physics seminar, (Online) Perimeter Institute, Canada.	October 2021
	55. Geometry Seminar, (Online) Lisbon, Portugal.	April 2021
	54. LAGOON: Leicester Algebra and Geometry Open ONline Seminar, (Online)	UK. July 2020
	53. Algebraic geometry seminar, Stony Brook University, USA.	May 2019
	52. Geometry and Physics, Rutgers New Brunswick, USA.	April 2019
	51. Algebraic geometry seminar, Imperial College, UK.	November 2018
	50. Algebraic geometry seminar, University of Oxford, UK.	November 2018
	49. String Theory Seminar, University of Oxford, UK.	October 2018
	48. Mathematical seminar/interview, University of Oxford, UK.	May 2018
	47. Séminaire de Géométrie et Quantification, Institut Henri Poincaré, France.	May 2018
	46. Geometry seminar, University College London/King's College London, UK.	April 2018
	45. DAMPT & DPMMS seminar/interview, University of Cambridge, UK	March 2018
	44. Max Dehn Seminar, University of Utah, USA	January 2018
	43. GEAR seminar, University of Illinois at Urbana Champaign, USA.	November 2017
	42. Felix Klein seminar, University of Notre Dame, USA.	November 2017
	41. (×2) Geometry Seminar, ITS, Vienna, Austria.	October 2017
	40. Mathematical Physics Seminar, University of Heidelberg, Germany.	October 2017
	39. Higher Differential Geometry seminar, MPI, Bonn, Germany.	Oct. 2017
	38. Algebraic Geometry Seminar, FU Berlin, Germany.	July 2017
	37. Mathematical Physics Seminar, IPMU, Japan.	June 2017
	36. Topology Seminar, Northwestern University, USA.	May 2017
	35. Mathematical Physics Seminar, IMPA, Rio de Janeiro, Brazil.	February 2017
	34. Geometric Analysis Seminar, University of Chicago, USA.	January 2017
	33. Mathematical Physics Seminar, Perdue University, West Lafayette, USA.	January 2017
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32. Algebraic Geometry Seminar, University of Chicago, USA.

January 2017

	31. Geometry and Physics Seminar (×2), Northwestern University, Spring 2017
	30. Algebraic Geometry Seminar, U. of Buenos Aires, Argentina. June 2012, May 2016
	29. Geometry Seminar, University of Texas at Austin, USA. April 2016
	28. Geometry and Analysis Seminar, University of Oxford, UK. January 2016
	27. (×2) Geometry seminar, EPFL, Lausanne, Switzerland. June 2015
	26. Geometry, Topology and Analysis seminar, University of Sydney, Australia. May 2015
	25. Differential Geometry Seminar, Harvard University, USA. March 2015
	24. Geometry Seminar, UNC at Chapel Hill, USA. January 2015
	23. Geometry Seminar, University of Minnesota, Minneapolis, USA. January 2015
SELECTED	9. Max Plank Institute MiS Leipzig, Germany. (1 month) 2025
Research Visits	8. Kyoto University, Japan. (1 month) 2024
	7. Mathematical Institute, University of Oxford, UK. (3 +6 months) 2018, 2023
	6. IHP, Paris, France (1+1+1 (Research in pairs) 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, Scientific Reports, Nature Portfolio. since 2023
	• Editorial Board Member, Geometriae Dedicata, Springer. since 2019
	• Guest Editor. SIGMA special issue "Geometry and Physics of Hitchin systems". 2017-2019
	• Editorial Board. New Collection, University of Oxford, ISSN: 1757-2541. 2010-2011
University and Department	• Senator of the <i>UIC Senate</i> and Fellow of the <i>Honors college</i> . since 2020
SERVICE AT UIC	• Co-Organiser, Geometry, Topology and Dynamics seminar. since 2016
	• Research Assistant Professor Search Committee (× 5). 2015-2020
	• Admissions, Fellowships, Assistantships committee (× 5) 2015-2019, 2021
	• Salary $(\times 1)$; Visitor $(\times 2)$; Faculty Search $(\times 1)$; Mathematics Club $(\times 1)$. 2017-2018
OTHER	• Alexander von Humboldt Foundation, external reviewer. since 2020
Professional Service Activities	• National Science Centre, Poland, proposal reviewer. 2020
	• Behavioural Science Referee: J. of Med.Int.Res.; Open Psy.J.; since 2020
	• NSF Reviewer (× 5). 2016, 2017, 2019, 2021, 2022
	• WMC SheSource Expert, for Women's Media Center (WMC). since 2017
	• Co-Organizer of Research seminars, University of Heidelberg, Germany. 2012-2013
	• MathSciNet Reviewer (accept duties $\sim~2$ times per year). since 2014
	• Admissions Interviewer. Magdalen and St Peter's Colleges, Oxford. 2009-2011
	• Mathematics Journal Referee (accept duties $\sim~5$ times per year). since 2012
	Duke; & Israel J. Math; Adv. Geo.; & J. Top.; Diff. Geom. and its App.; Commun. Math. Phys.; Pac. J. Math. & Geo. Ded.; SIGMA & Q. J. Math; Int. J. Math. & PRE; Revista Mat. Comp.; Annals of he ENS; PRIMS & Int. Math. R. Not.; J. Pure Appl. Algebra; J. LMS and J. Geom. Phys.

University Large Class Teaching

• Math 300: Writing for Mathematics. (×14) Spring 2020, 2022 & Fall 2020, 2021 • Math 215: Introduction to advanced mathematics. (×4) Fall 2015, 2016 & Spring 2018 • Math 596: Independent study. (×6) (graduate course) Fall 2015, 2016, 2017 & Spring 2017 • Math 547: Algebraic Topology I. (×1) (graduate course) Fall 2016 • Math 549: Differentiable Manifolds I. (×2) (graduate course) Fall 2015 & Spring 2017 University Instructor, University of Illinois at Urbana-Champaign, USA • Fundamental Mathematics. Math 348 ($\times 4$) and Math 347 ($\times 2$) 2013-2015 College lectureship, University of Oxford, UK. 2010-2012 University 2 TO 1 • 3D Calculus; Calculus of Variations; Linear Algebra I, II; Groups, Rings and Fields. TEACHING 2010 Class Tutor, Mathematical Institute, Oxford, UK. Teaching • B9. Algebraic Number Theory (& Revision Classes). Assistantships **Teaching Assistant**, Mathematical Institute, University of Oxford. 2009-2010 • B9. Algebraic Number Theory; B3. Geometry of Surfaces; C9.1 Elliptic Curves. 2006-2008 **Teaching Assistant**, National University of La Plata, Argentina. • Analysis (Mathematics dept.); Probabilities and Statistics (Engineering dept.). INTERNATIONAL • GEC Tutor 2023 PROGRAMS & • OPUS Tutor & WISC Tutor, University of Oxford Programs. 2010-2012 HIGH SCHOOL • CIE Tutor & Summer Lecturer, Center for International Education, Oxford. 2009-2011 TEACHING • Junior Lecturer, Colegio Nacional Rafael Hernandez (High School) Argentina. 2007 • Tutor and Mentor online, *Tutor.com*, New York City, US. (through Latinhire). 2005-2008 OUTREACH • Book Reading: Oxford's council library, Oxford, UK. May 2023 ACTIVITIES • 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.

• Co-Organizer (w. James Unwin): SIDE MATH 2020

• Connections for Women Panelist, MSRI, Berkeley, USA.

• Volunteer: Sonia Maths day for Girls and UIUC GEMS program

• Speaker: UIC AWM Chapter, Stanford Math Organization, New College Oxford

• Speaker: Stanford Women in Math Mentoring, UChicago Women in STEM club

• Co-Organizer (w. James Unwin): 1st, 2nd, 3rd, 4th, 5th Sonia day at UIC.

University Instructor, University of Illinois at Chicago, USA

July & June 2021

2021

2021

2020

2019 2013-2015

2015-2019

• 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
• (×4) About Children Books Notices of the AMS (x2), Illinois Conn.; Block Club Chicago; UIC Today.	2021-	-2023
• (× 5) About math life / women in math / activities UIC Today; Wiaarkhu Magazine;: Interview for "2020 Lathisms"; Interview about organizing workshops at MFO, LaPlata1.com.	2019-	-2022
• (× 5) About Gossip spread – A trust model for spreading of gossip, with Bhar ZAP.aeiou; UIC News; Phys.org; Tech Explorist; NewsWise.	nsali.	2019
• (×14) About Phone-Walkers – behavioural study done with James Unwin.	ет	2018
The Atlantic; The Chicago Tribune; The Süddeutsche Zeitung; The Time MIT Tech. Rev.; Cronica Global; The Week; Co-Design; UIC LAS; Insight; Nextbigwhat; Xuehua; Marketingoops - Thailand; Cromo - Ur	Work	olace
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 MIT Tech. Rev.; Cronica Global; The Week; Co-Design; UIC LAS; Insight; Nextbigwhat; Xuehua; Marketingoops - Thailand; Cromo - Ur (×2) About projects I mentored. Business Wire, Kusi News. (×3) Sonia Kovalevsky Days - with J. Unwin. 	Workpuguay.	2017 -2019
 MIT Tech. Rev.; Cronica Global; The Week; Co-Design; UIC LAS; Insight; Nextbigwhat; Xuehua; Marketingoops - Thailand; Cromo - Ur (×2) About projects I mentored. Business Wire, Kusi News. (×3) Sonia Kovalevsky Days - with J. Unwin. AWM Newsletter, 49 (5); UIC News; AWM Newsletter, 46 (6). 	Workpuguay.	2017 -2019 -2017
 MIT Tech. Rev.; Cronica Global; The Week; Co-Design; UIC LAS; Insight; Nextbigwhat; Xuehua; Marketingoops - Thailand; Cromo - Ur (×2) About projects I mentored. Business Wire, Kusi News. (×3) Sonia Kovalevsky Days - with J. Unwin. AWM Newsletter, 49 (5); UIC News; AWM Newsletter, 46 (6). (×1) About Humboldt Fellowship - awards to J. Unwin and myself. UIC Tellowship - with J. Unwin and myself. 	Worky uguay. 2016- oday.	2017 -2019 -2017 -2016
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MIT Tech. Rev.; Cronica Global; The Week; Co-Design; UIC LAS; Insight; Nextbigwhat; Xuehua; Marketingoops - Thailand; Cromo - Ur • (×2) About projects I mentored. Business Wire, Kusi News. • (×3) Sonia Kovalevsky Days - with J. Unwin. AWM Newsletter, 49 (5); UIC News; AWM Newsletter, 46 (6). • (×1) About Humboldt Fellowship - awards to J. Unwin and myself. UIC To (×2) About workshops co-organized. SCGP News; AIMatters 2016. • (×3) About being top undergraduate student. La Nación, Clarín, El Di • Spanish: Native; English and French: Fluent; German: A2	Workpuguay. 2016- oday.	2017 -2019 2017 2016 2009

In the media

Work	69. A mathematical understanding of Hobbes & Rousseau's political theories, with Robin D	unbar.
IN PROGRESS (*= STUDENT)	68. On oceanic viral genomes, with Max Telford and James Unwin.	
(= STUDENT)	67. Mathematical influencers, with Raina Wu [⋆] .	
	66. Migration effects on genetic dissorders, with Shari Hsu*.	
	65. Mathematical Epidemiology, with Ashna Dagam*.	
	64. Creating social safe zones, with Ashna Dagam [⋆] and Sanjay Dagam [⋆] .	
	63. Minimal surfaces and orthogonal Higgs bundles, with Ian McIntosh.	
	62. T-branes in the 4-punctured sphere, with Laura Fredrickson.	
	61. Branes and bi-lagrangians, with Ruxandra Moraru.	
	60. Building a group, with Steve Rayan.	
	59. Mirror symmetry for hyperpolygons, with Steve Rayan.	
	58. Differential operator aspects of branched SL-opers, with Indranil Biswas and Sebastian	Heller
CHILDREN Books	57. Ene and the Magic Steps: a scientific adventure, ISBN: 978-1-7370584-4-1, with Cecilia La Rosa (Illustrator).	2023
	56. The potential to inspire: Sonia Kovalevsky's journey to become a scientist. ISBN: 979-8-9859682-2-4.	2023
	55. Roku Raccoon's difficult day, ISBN: 979-8-9859682-4-8, with Martina Peškar-Rusznák (Illustrator).	2023
	54. Ene and the Magic Tree: a mathematical adventure, ISBN: 978-17370584-1-0, with Cecilia La Rosa (Illustrator).	2021
	53. Ene and the Magic Boxes: an odyssey through the world of artisans, ISBN: 978-17370584-5-8, with Cecilia La Rosa (Illustrator).	2021
MATHEMATICS VOLUMES	52. Writing for Mathematics, ISBN 979-8-7814575-9-5.	2021
& Books	51. Geometry and Physics of Hitchin Systems, edited with Lara B. Anderson Symmetry, Integrability and Geometry: Methods and Applications (SIGMA).	2019
	50. Geometry and Physics of Higgs Bundles, edited with Anderson, Hausel, Mazzeo Oberwolfach Reports, Vol. 16, N. 2, 2019, pp. 1357–1417 DOI: 10.4171/OWR/2019/2019/2019/2019/2019/2019/2019/2019	2019 3
Preprints (*= student)	49. Animal Synchrony and agents' segregation, with Robin I.M. Dunbar and Sheryl Hsu*. ArXiv:2212.07505 (submitted)	2022
	48. Real slices of SL-opers, with Indranil Biswas and Sebastian Heller. ArXiv:2212.01695 (submitted)	2022
Publications (*= student)	47. Understanding Zillow's dataset via stock market indicators, with Varun Mittal*. Heliyon (Finance Special Issue), Cell Press, Volume 9, Issue 5, 2023.	2023
	46. Correlations between COVID-19 and Dengue, with Paula Bergero and Grace Wang*. Nature Scientific Reports, volume 13, 1525 (2023).	2023
	45. Focus on a Scientist: Rafe Mazzeo, with Laura Fredrickson Emissary, MSRI Fall 2022.	2022
	44. Generalized Hyperpolygons and applications, ZAG's Handbook of MAG , CRC press.	2022
	43. The Power of Many: A Physarum Swarm Steiner Tree Algorithm, with Sheryl Hsu* and Fidel I. Schaposnik Massolo. Nature Scientific Reports, volume 12, 14536 (2022).	2022
	42. Cell fusion through slime mold network dynamics, with Sheryl Hsu*. Journal of the Royal Society Interface, J. R. Soc. Interface 19: 20220054.	2022

41.	Triality for homogeneous polynomials, with Sebastian Schulz*. SIGMA, 17 (2021), 079, 14 pages.	2021
40.	Branes and moduli spaces of Higgs bundles on smooth projective varieties. with Indranil Biswas and Sebastian Heller.	2021
	Research in the Mathematical Science, Vol. 8, No. 52 (2021)	
39.	A modified age-structured SIR model for COVID-19 type viruses, with Vishaal Ram*. Nature Scientific Reports, 11, 15194 (2021).	2021
38.	On the generalized $SO(2n, \mathbb{C})$ -opers, with Indranil Biswas and Mengxue Yang*. Annals of Global Analysis and Geometry, 60, pages $539 - 557$ (2021)	2021
37.	Advanced topics in gauge theory: geometry and physics of Higgs bundles. 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. Editorial Médica Panamericana, PROTIPED, pp.75-90; ISSN: 2362-3942.	2021
35.	What is a hyperpolygon, with Steve Rayan.	2021
0.4	Notices of the AMS, Vol. 68, N. 1, January 2021.	2021
34.	Moduli spaces of generalized hyperpolygons, with Steve Rayan. The Quarterly Journal of Mathematics, Vol 72 (2021), 1–25;.	2021
33.	Extrapolating continuous color emotions through deep learning, with Vishaal Ram*,	2020
	and Konstantinou, Volkan, Papadatou-Pastou, Manav, Jonauskaite, Mohr. Physical Review Research, Vol. 2, No. 3, (2020).	
32.	Orthogonal Higgs bundles with singular spectral curves, with Bradlow and Branco*. Communications in Analysis and Geometry, Vol. 28, N. 8, 1895–1931, 2020.	2020
31.	Generalized B-opers, with Indranil Biswas and Mengxue Yang*. SIGMA 16 (2020), 041, 28 pages.	2020
30.	Minimal percolating sets for mutating infectious diseases, with Yuyuan Luo*. Physical Review Research, Vol. 2, No. 2 (2020).	2020
29.	Higgs bundles without geometry, with Steve Rayan. Snapshots of modern mathematics, DOI 10.14760/SNAP-2020-008-EN.	2020
20	Higgs bundles – recent applications,	2020
	Notices of the AMS, Vol. 67 No. 5 (May 2020)	
	A trust model for bootstrap percolation, with Rinni Bhansali*. Proc. R. Soc. A 476: 20190826 (2020).	2020
26.	Cayley and Langlands type correspondences for orthogonal Higgs bundles, with David Baraglia. Transactions of the AMS, Vol. 371, Num. 10 (2019) 41 pages.	2019
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, with L. B. Anderson, M. Esole and L. Fredrickson. SIGMA , 14 (2018), 037, 27 pages	2018
23.	Branes through finite group actions, with Sebastian Heller. Journal of Geometry and Physics, Vol. 129 (2018) 279-293.	2018
22.	Brauer group of Moduli of Higgs bundles and connections, with Baraglia and Biswas. A Festschrift in Honour of Nigel Hitchin, Vol. 2, Oxford University Press.	2018
21.	Modeling epidemics on d-cliqued graphs, with Anlin Zhang*. Letters in Biomathematics, Volume 5, Number 1 (2018), p. 49-69.	2018
20.	The phone walkers: A study of human dependance on inactive mobile devices, with James Unwin. Behaviour , (2018) Volume 155, Issue 5, p. 389 - 414.	2018
19.	On the geometry of regular icosahedral capsids containing disymmetrons, with K-S. Ang * .	2017
18.	Journal of Structural Biology, Volume 197, Issue 3 (2017), p. 340-349. T-Branes at Limits of Geometry, with L.B. Anderson, J.J. Heckman, and S. Katz.	2017
	J. High Energ. Phys. (2017) 2017: 58.	
11.	An introduction to spectral data for Higgs bundles Lecture Note Series, IMS LNS Vol 65 (2017), 38 pages.	2017

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15.	Automorphisms of \mathbb{C}^* moduli spaces associated to a Riemann surface, with David Baraglia and Indranil Biswas. SIGMA 12 (2016), 007, 14 pages.	2016
14.	Higgs bundles and exceptional isogenies, with Steve Bradlow. Res. Math. Sci. (2016) 3:14 DOI 10.1186/s40687-016-0062-0.	2016
13.	Interface control and snow crystal growth, with Jessica Li*. Phys. Rev. E, 93, 023302, 2016.	2016
12.	Real structures on moduli spaces of Higgs bundles, with David Baraglia. Adv. Theor. Math. Phys., Vol. 20, N. 3 (2016), 525-551.	2016
11.	Higgs bundles and applications. Oberwolfach Reports, Report No. 31 (2015), 31-33.	2015
10.	Spectral data for $U(m, m)$ -Higgs bundles. Int. Math. Res. Notices, Vol. 2015 no. 11.	2015
9.	Nonabelianization of Higgs bundles, with Nigel Hitchin. J. Differential Geom. Volume 97, Number 1 (2014), 79-89.	2014
8.	Higgs bundles and (A, B, A) -branes, with David Baraglia. Communications in Mathematical Physics, Vol. 331 No. 3.	2014
7.	Spectral data for G-Higgs bundles. DPhil Thesis , University of Oxford, 170 p.	2013
6.	Monodromy of the SL_2 Hitchin fibration. Int. J. Math. Vol. 24, 1350013 (2013)	2013
5.	Working from Home. 4 Months and Still Counting, with A. Frabetti, V. Salnikov EMS Newsletter , 9 (117), 38-41, September 2020.	2020
4.	Mathematics in the sea, with James Unwin. AWM Newsletter, Vol. 49, No. 6.	2019
3.	Sonia Kovalevsky Days, the potential to inspire, with James Unwin. AWM Newsletter . Vol.49, No.5.	2019
2.	Bridges between worlds, from past to present. AIMatters 2016, Newsletter of the American Institute of Mathematics.	2016
1.	Sonia Kovalevsky Days in Chicago, with J. Unwin. AWM Newsletter, Vol. 46, No.6.	2016

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