

Curriculum Vitae

Viktor L. Ginzburg

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University of California, Santa Cruz, CA 95064, USA

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July 20, 2022

Signature: _____ Date: _____

Education

- University of California, Berkeley 1988–1990
 - Ph.D. Mathematics, May 1990
 - *Thesis title*: On closed characteristics of two forms
 - *Thesis advisor*: Alan Weinstein
- Moscow Institute of Steel and Alloys 1980–1986
 - M.Sc. Mathematics, March 1986

Employment

- University of California, Santa Cruz
 - Professor of Mathematics 2004–present
 - Associate Professor of Mathematics 2000–2004
 - Assistant Professor of Mathematics 1996–2000
- NSF Fellowship, Postdoctoral Fellow
 - University of California, Berkeley 1995–1996
 - Stanford University 1993–1994
 - Institute for Advanced Study 1993
- Stanford University, Szegö Assistant Professor 1991–1993
- Mathematical Sciences Research Institute, Postdoctoral Fellow 1990–1991
- University of California, Berkeley
 - Teaching Assistant 1989–1990
 - Research Assistant 1988–1989
- National Research Institute for Automation of Metallurgical Industry, Software Engineer 1986–1988

Visiting Positions

- IMJ-PRG, Sorbonne University, Paris, France ¹ May 2022
- Simons Visiting Professor, Oberwolfach MFO/Bochum July 2019
- Severo Ochoa Distinguished Professor, ICMAT Spirings or Summers 2016–2019
- Severo Ochoa Laboratory, ICMAT, Chair Spirings or Summers 2013–2015
- ETH, Zürich, Switzerland April 2012
- IAS, Princeton, NJ March 2012
- NCTS (South), Tainan, Taiwan January–February 2012
- MSRI, Berkeley; Research Professor Spring 2010
- IST, Lisbon, Portugal Summer 2002
- EPFL, Lausanne, Switzerland July 2000
- Université Paris-Sud (XI), Orsay, France Summer 1998
- ETH, Zürich, Switzerland March 1998
- ETH, Zürich, Switzerland Summer 1996
- Tel Aviv University, Tel Aviv, Israel December 1996
- Isaac Newton Institute for Mathematical Sciences, University of Cambridge, England Summer 1994
- Université Louis Pasteur, Strasbourg, France Summer 1990

Grants, Awards & Fellowships

- Fellow of the American Mathematical Society 2020–present
- Simons Collaboration Grant 2018–2023
- *Concours Annuel* Prize, Académie Royale de Belgique 2016
- “Viktor Ginzburg Lab”, ICMAT, Severo Ochoa Foundation 2013–2015
- NSF Grant 2013–2016
- NSF Grant 2010–2013
- NSF Grant 2007–2010
- NSF Grant 2003–2006
- NSF Grant 2000–2003
- Binational Science Foundation Grant (US–Israel) 1997–2000

¹In what follows, the work done since the most recent merit increase case (2018) is color coded in red and the work done in the period 2012–2018 is color coded in blue. In addition, publications and talks are also labeled as N18 and N12.

– joint with V. Guillemin (MIT), Y. Karshon (University of Toronto)
and S. Tolman (University of Illinois, Urbana-Champaign)

- NSF Grant, joint with R. Montgomery (UCSC) 1997–2000
- General Non-Tenured Faculty Development Awards, UCSC 1997–1999
- Academic Senate Committee on Research Grants, UCSC 1996–2012
- NSF Postdoctoral Fellowship 1993–1996

Publications: Books

- *Moment maps, Cobordisms, and Hamiltonian group actions*, co-authors V. Guillemin and Y. Karshon; Mathematical Surveys and Monographs, vol. 98; American Mathematical Society, 2002, 350 pp.

Publications: Journals and Proceedings²

73. (FN18*) Pseudo-rotations vs. rotations, co-author: B. Gürel; *J. London Math. Soc.*, (2022)
<https://doi.org/10.1112/jlms.12665>.
72. (FN18*) Another look at the Hofer–Zehnder conjecture, co-authors: E. Çineli, B. Gürel; *J. Fixed Point Theory Appl.*, *Claude Viterbo's 60th Birthday Festschrift*, (2022) 24:53 <https://doi.org/10.1007/s11784-022-00937-w>.
71. (FN18*) From pseudo-rotations to holomorphic curves via quantum Steenrod squares, co-authors: E. Çineli, B. Gürel; *Int. Math. Res. Not. IMRN*, 2022, no. 3, 2274–2297.
70. (FN18*) Dynamical convexity and closed orbits on symmetric spheres, co-author: L. Macarini; *Duke Math. J.*, **170** (2021), 1201–1250.
69. (FN18*) On the spectral characterization of Besse and Zoll Reeb flows, co-authors: B. Gürel, M. Mazzucchelli; *Ann. Inst. H. Poincaré C Anal. Non Linéaire*, **38** (2021), 549–576.
68. (FN18*) On the iterated Hamiltonian Floer homology, co-author: E. Çineli; *Commun. Contemp. Math.*, **23** (2021), no. 3, Paper No. 2050026, 23 pp.
67. (FN18*) Pseudo-rotations and holomorphic curves, co-authors: E. Çineli, B. Gürel, *Selecta Math. (N.S.)*; **26** (2020), no. 5, Paper No. 78, 31 pp.
66. (FN18*) Lusternik–Schnirelmann theory and closed Reeb orbits, co-author: B. Gürel; *Math. Z.*, **295** (2020), 515–582.
65. (FN18*) Approximate identities and Lagrangian Poincaré recurrence, co-author: B. Gürel; *Arnold Math. J.*, **5** (2019), 5–14.
64. (FN18*) On the filtered symplectic homology of prequantization bundles, co-author: J. Shon; *Internat. J. Math.*, **29** (2018), no. 11, 1850071, 35 pp.
63. (FN18*) Hamiltonian pseudo-rotations of projective spaces, co-author: B. Gürel; *Invent. Math.*, (2018)
DOI: 10.1007/s00222-018-0818-9.

²In mathematical publications the authors are usually listed in alphabetical order and always assumed to have made equal contribution unless explicitly stated otherwise.

62. (FN12*) Multiplicity of closed Reeb orbits on prequantization bundles, co-authors: B. Gürel, L. Macarini; *Israel J. Math.*, (2018) DOI: 10.1007/s11856-018-1769-y.
61. (FN12*) Conley conjecture revisited, co-author: B. Gürel; *Int. Math. Res. Notices IMRN*, 2017, no. 3, 761–798.
60. (FN12*) Random chain complexes, co-author: D. Pasechnik; *Arnold Math. J.*, **3** (2017), 197–204.
59. (FN12*) Higher Maslov indices, co-authors: R. Casals and F. Presas; *Journal of Geometry and Physics*, **115** (2017), 167–177.
58. (FN12*) Non-contractible periodic orbits in Hamiltonian dynamics on closed symplectic manifolds, co-author B.Z. Gürel; *Compositio Mathematica*, **152** (2016), 1777–1799.
57. (FN12*) A remark on unique ergodicity and the contact type condition, co-author: C. Niche; *Archiv der Mathematik*, **105** (2015), 585–592.
56. (FN12*) The Conley conjecture and beyond, co-author B.Z. Gürel; *Arnold Math J.*, **1** (2015), 299–337.
55. (FN12*) Fragility and persistence of leafwise intersections, co-author: B.Z. Gürel; *Math. Z.*, **280** (2015), 989–1004.
54. (FN12*) On the Conley conjecture for Reeb flows, co-authors: B.Z. Gürel, L. Macarini; *Internat. J. Math.*, **26** (2015), 1550047 (22 pages); doi: 10.1142/S0129167X15500470.
53. (FN12*) Iterated index and the mean Euler characteristic, co-author: Y. Gören; *J. Topol. Anal.*, **7** (2015), 453–481.
52. (FN12*) Hyperbolic fixed points and periodic orbits of Hamiltonian diffeomorphisms, co-author: B.Z. Gürel; *Duke Math. J.*, **163** (2014), 565–590.
51. (FN12*) Closed Reeb orbits on the sphere and symplectically degenerate maxima, co-authors: D. Hein, U.L. Hryniewicz, L. Macarini; *Acta Math. Vietnam.*, **38** (2013), 55–78.
50. Action-index relations for perfect Hamiltonian diffeomorphisms, co-authors: M. Chance and B.Z. Gürel; *J. Sympl. Geom.*, **11** (2013), 449–474.
49. Arnold conjecture for Clifford symplectic pencils, co-author: D. Hein; *Israel J. Math.*, **196** (2013), 95–112.
48. Hyperkähler Arnold conjecture and its generalizations, co-author: D. Hein; *Internat. J. Math.*, **23** (2012), doi: 10.1142/S0129167X12500772.
47. Conley conjecture for negative monotone symplectic manifolds, co-author B.Z. Gürel; *Int. Math. Res. Not. IMRN*, 2011, doi: 10.1093/imrn/rnr081.
46. On the Maslov class rigidity for coisotropic submanifolds, *Pacific J. Math.*, **250** (2011), 139–161.
45. The Conley conjecture, *Ann. of Math.*, **172** (2010), 1127–1180.
44. Local Floer homology and the action gap, co-author: B.Z. Gürel; *J. Sympl. Geom.*, **8** (2010), 323–357.
43. Homological resonances for Hamiltonian diffeomorphisms and Reeb flows, co-author: E. Kerman, *Int. Math. Res. Not. IMRN*, 2010, no. 1, 53–68.
42. On the generic existence of periodic orbits in Hamiltonian dynamics, co-author: B.Z. Gürel; *J. Mod. Dyn.*, **3** (2009), 595–610.

41. Action and index spectra and periodic orbits in Hamiltonian dynamics, co-author: B.Z. Gürel, *Geom. Topol.*, **13** (2009), 2745–2805.
40. Periodic orbits of twisted geodesic flows and the Weinstein-Moser theorem, co-author: B.Z. Gürel, *Comment. Math. Helv.*, **84** (2009), 865–907.
39. The generalized Weinstein–Moser theorem, co-author: B.Z. Gürel, *ERA-MS*, **14** (2007), 20–29.
38. Coisotropic intersections, *Duke Math. J.*, **140** (2007), 111–163.
37. Energy capacity inequalities via an action selector, co-authors: U. Frauenfelder and F. Schlenk, in *Geometry, Spectral Theory, and Dynamics; Proceedings in Memory of Robert Brooks*, Eds.: M. Entov et al, Contemporary Mathematics, vol. 387, AMS, 2005; pp. 129–152.
36. The Weinstein conjecture and the theorems of nearby and almost existence, in *The Breadth of Symplectic and Poisson Geometry*, Progr. Math., 232, Birkäuser Boston, 2005, pp. 139–172.
35. Existence of relative periodic orbits near relative equilibria, co-author: E. Lerman, *Math. Res. Lett.*, **11** (2004), 397–412.
34. Symplectic homology and periodic orbits near symplectic submanifolds, co-authors: K. Cieliebak and E. Kerman, *Comment. Math. Helv.*, **79** (2004), 554–581.
33. Relative Hofer–Zehnder capacity and periodic orbits in twisted cotangent bundles, co-author: B.Z. Gürel, *Duke Math. J.*, **123** (2004), 1–47.
32. Comments to some of Arnold’s problems (1981-9 and related problems and 1994-13), in *Arnold’s problems*, Ed.: V.I. Arnold, Springer–Verlag and Phasis, 2004; pp. 395–401, 557–558.
31. A C^2 -smooth counterexample to the Hamiltonian Seifert conjecture in \mathbb{R}^4 , co-author: B.Z. Gürel, *Ann. of Math.*, **158** (2003), 953–976.
30. On the construction of a C^2 -counterexample to the Hamiltonian Seifert conjecture in \mathbb{R}^4 , co-author B.Z. Gürel, *Electron. Res. Announc. Amer. Math. Soc.*, **8** (2002), 11–19 (electronic).
29. Periodic orbits of Hamiltonian flows near symplectic extrema, co-author E. Kerman, *Pacific J. Math.*, **206** (2002), 69–91.
28. Grothendieck groups of Poisson vector bundles, *J. Sympl. Geom.*, **1** (2001), 121–169.
27. The Hamiltonian Seifert conjecture: examples and open problems, *Proceedings of the Third European Congress of Mathematicians Barcelona, 2000*, Vol. II, 547–555, Progr. Math., 202, Birkhäuser, Basel, 2001.
26. Holonomy on Poisson manifolds and the modular class, co-author: A. Golubev, *Israel J. Math.*, **122** (2001), 221–242.
25. Geometric quantization and no go theorems, co-author: R. Montgomery, *Banach Center Publications*, **51** (2000), 69–77.
24. Assignments and abstract moment maps, co-authors: V. Guillemin and Y. Karshon, *J. Differential Geom.*, **52** (1999), 259–301.
23. Periodic orbits in magnetic fields in dimensions greater than two, co-author: E. Kerman, in *Geometry and Topology in Dynamics*, Ed.: M. Barge and K. Kuperberg; Publ. of AMS, Cont. Math. Series., **246** (1999), 113–121.
22. Hamiltonian dynamical systems without periodic orbits, in *Proceedings of the Northern California Symplectic Geometry Seminar*; Ed.: Y. Eliashberg et al; Amer. Math. Soc. Transl. (2), **196** (1999), 35–48.

21. Equivariant Poisson cohomology and a spectral sequence associated with a moment map, *Int. J. Math.*, **10** (1999), 977–1010.
20. The relation between compact and non-compact equivariant cobordisms, co-authors: V. Guillemin and Y. Karshon, in *Proceedings of the International Workshop on Topology*, Ed.: M. Farber, W. Lueck, S. Weinberger; Publ. of AMS, Cont. Math. Series, vol. 231, (1999) 99–112.
19. A smooth counterexample to the Hamiltonian Seifert conjecture in \mathbb{R}^6 , *Int. Math. Res. Not. IMRN*, 1997, no. 13, 642–650.
18. On the existence and non-existence of closed trajectories for some Hamiltonian flows, *Math. Z.*, **223** (1996), 397–409.
17. Accessible points and closed trajectories of mechanical systems. Appendix to *Global Analysis in Mathematical Physics. Geometric and Stochastic Methods* by Yu. Gliklikh, Springer-Verlag, New York, 1996.
16. On closed trajectories of a charge in a magnetic field. An application of symplectic geometry, In: *Contact and Symplectic Geometry*, C.B. Thomas (ed.), INI Publications, Cambridge University Press, Cambridge, 1996, pp. 131–148.
15. Cobordism theory and localization formula for Hamiltonian group actions, co-authors: V. Guillemin and Y. Karshon, *Int. Math. Res. Not. IMRN*, 1996, no. 5, 222–234.
14. Momentum mappings and Poisson cohomology, *Int. J. Math.*, **7** (1996), 329–358.
13. An embedding $S^{2n-1} \rightarrow \mathbb{R}^{2n}$, $2n - 1 \geq 7$, whose Hamiltonian flow has no periodic trajectories, *Int. Math. Res. Not. IMRN*, 1995, no. 2, 83–98.
12. Steady fluid flows and symplectic geometry, co-author: B. Khesin, *J. Geom. Phys.*, **14** (1994), 195–210.
11. Calculation of contact and symplectic cobordism groups, *Topology*, **31** (1992), 767–773.
10. Poisson cohomology of Morita equivalent Poisson manifolds, co-author: J.-H. Lu, *Int. Math. Res. Not. IMRN*, **10** (1992), 199–205.
9. Review of the book *The topology of torus actions on symplectic manifolds* by M. Audin, *Bull. Amer. Math. Soc.* (new series), **27** (1992), 315–320.
8. Topology of steady fluid flows, co-author: B. Khesin, in *Topological Aspects of the Dynamics of Fluids and Plasmas*, H.K. Moffat et al. (eds.), 1992, Kluwer Academic Publishers, 265–272.
7. Some remarks on symplectic actions of compact groups, *Math. Z.*, **210** (1992), 625–640.
6. Lie-Poisson structure on some Poisson Lie groups, co-author: A. Weinstein, *J. Amer. Math. Soc.*, **5** (1992), 445–453.
5. On closed characteristics of 2-forms, *Ph.D. Thesis*, UC Berkeley, 1990.
4. Cobordisms of contact and symplectic manifolds, *Funct. Anal. Appl.*, **23** (1989), no. 2, 106–110.
3. On closed characteristics of 2-form, *Russ. Math. Surveys*, **43** (1988), no. 5, 225–226.
2. New generalizations of Poincaré’s geometric theorem, *Funct. Anal. Appl.*, **21** (1987), no. 2, 100–106.
1. On the number of inverse images of a point for continuous maps, *Russ. Math. Survey*, **41** (1986), no. 2, 195–196.

Publications: Preprints

1. (FN12*) My contact homology shopping list, Preprint arXiv:1412.7999; not intended for publication in a math journal.

Invited Talks, Lectures and Minicourses

1. *New results on the existence of periodic orbits*; June 1996; ETH, Zürich, Switzerland
2. *Non-compact cobordisms*; July 1996; Conference on Symplectic Geometry and Quantization, Lumini, France
3. *Geometry of Poisson Lie groups*; December 1996; UC Lie Group and Lie Algebra Workshop, UCSC
4. *Geometric quantization and no go theorems*; December 1996; Tel Aviv University, Tel Aviv, Israel
5. *Geometric quantization and no go theorems*; December 1996; Hebrew University, Jerusalem, Israel
6. *A counterexample to the Hamiltonian Seifert conjecture in dimension greater than or equal to six*; April 1997; Midwest Geometry Conference, Lawrence, KA
7. *Equivariant moment maps for Poisson Lie groups*; April 1997; AMS Meeting, Corvallis, OR
8. *Periodic orbits of Hamiltonian systems and dynamics in magnetic fields*; April 1997; AMS Meeting, Corvallis, OR
9. *A counterexample to the Hamiltonian Seifert conjecture in dimension greater than or equal to six*; June 1997; Workshop on Symplectic Geometry, The Fields Institute, Toronto, Canada
10. *Abstract moment maps: local and global properties, cobordisms*; September 1997; Symposium on Symplectic Geometry, University of Warwick, England
11. *Hamiltonian flows without periodic orbits*, September 1997; Symposium on Symplectic Geometry, University of Warwick, England
12. *Hamiltonian flows without periodic orbits*, December 1997; Hebrew University, Jerusalem, Israel
13. *Periodic orbits of Dynamical Systems: Seifert Conjecture and Beyond*, February 1998; Colloquium talk, UCSC
14. *Abstract moment maps: A step from symplectic geometry to topology*, March 1998; ETH, Zürich, Switzerland
15. *Hamiltonian dynamical systems without periodic orbits*, June 1998; University Paris-Sud, Orsay, France
16. *Non-compact cobordisms and abstract moment maps: A step from symplectic geometry to topology*, July 1998; University Paris-Sud, Orsay, France
17. *Abstract moment maps, I*, July 1998; Symposium on Symplectic Geometry, University of Warwick, England
18. *Modular Class, holonomy on Poisson manifolds, and Poisson cohomology*; January 1999; AMS Meeting, San Antonio, TX
19. *Examples of Hamiltonian systems with or without periodic orbits*; January 1999; AMS Meeting, San Antonio, TX

20. *Holonomy on Poisson manifolds and the Modular Class*; March 1999; Berkeley–Davis–Santa Cruz–Stanford Joint Symplectic Seminar, Stanford University, CA
21. *Periodic orbits in magnetic fields in dimensions greater than two*, April 1999; Hebrew University, Jerusalem, Israel
22. *Periodic orbits in magnetic fields*, April 1999; Tel Aviv University, Tel Aviv, Israel
23. *Periodic orbits in magnetic fields in dimensions greater than two*; June 1999; Conference on Symplectic Geometry, Instituto Superior Técnico, Lisbon, Portugal
24. *Abstract moment maps and assignments*; July 1999; Analysis Seminar, EPFL, Lausanne, Switzerland
25. *Abstract moment maps and assignments*; July 1999; Geometry and quantization of symplectic manifolds and quantum integrable systems, CSF, Ascona, Switzerland
26. *Holonomy on Poisson manifolds, Morita equivalence, and the modular class*, October 1999; International Conference on Poisson Geometry and Integrable Systems, Hangzhou, China
27. *Existence of periodic orbits for some classes of Hamiltonian systems*, June 2000; Math 2000, Meeting of Canadian Mathematical Society, Hamilton, Canada
28. *Poisson topology: Morita equivalence, characteristic classes, and all that*, June 2000; Poisson 2000, Lumini, France
29. *The Hamiltonian Seifert Conjecture: Examples and open problems*, July 2000; Third European Congress of Mathematicians, Barcelona, Spain
30. *The Hamiltonian Seifert conjecture*, September 2000; AMS Meeting, Toronto, Ontario
31. *The Hamiltonian Seifert Conjecture: Examples and open problems*, October 2000; Colloquium talk, Rice University, Houston, TX
32. *Poisson topology: Grothendieck groups of Poisson vector bundles*, November 2000; Prospects in Geometry, MPI, Leipzig, Germany
33. *Hamiltonian systems with and without periodic orbits*, November 2000; Symplectic Geometry and Dynamical Systems, Workshop on the occasion of Edi Zehnder’s 60th birthday, ETH, Zürich, Switzerland
34. *Grothendieck groups of Poisson vector bundles*, April 2001; Center for Geometry and Mathematical Physics Seminar, Pennsylvania State University
35. *Periodic orbits of Hamiltonian flows near symplectic extrema*, April 2001; Center for Dynamical Systems Seminar, Pennsylvania State University
36. *Grothendieck groups of Poisson vector bundles*, June 2001; Workshop “Poisson Geometry”, ESI, Vienna, Austria
37. *Morita category in Poisson geometry*, June 2001; Workshop on Poisson Geometry, ESI, Vienna, Austria
38. *A C^2 -smooth counterexample to the Hamiltonian Seifert conjecture in \mathbb{R}^4* , July 2001; “Dynamische Systeme”, Mathematisches Forschungsinstitut Oberwolfach, Germany
39. *A C^2 -smooth counterexample to the Hamiltonian Seifert conjecture in dimension four*, August 2001; Workshop on Symplectic and Contact Topology, Lorentz Center, Leiden, Netherlands
40. *Non-degenerate abstract moment maps*, November 2001; AMS Meeting, Irvine, California

41. *Periodic orbits of a charge in a magnetic field*, March 2001; AMS Meeting, Atlanta, Georgia
42. *A C^2 -smooth counterexample to the Hamiltonian Seifert conjecture in \mathbb{R}^4* , April 2002; MIT Symplectic and Contact Geometry Conference, MIT
43. *Relative symplectic capacities and periodic orbits in twisted cotangent bundles*, April 2002; Geometry and Dynamics, Tel Aviv, Israel
44. *Periodic orbits of Hamiltonian systems*, July 2002, short course, IST Summer Lectures in Geometry, Lisbon, Portugal
45. *A C^2 -smooth counterexample to the Hamiltonian Seifert conjecture in \mathbb{R}^4* , August 2002; Aspects of Foliation Theory in Geometry, Topology and Physics, ESI, Vienna, Austria
46. *The first steps of Poisson topology*, September 2002; Poisson 2002, Lisbon, Portugal
47. *Periodic orbits of Hamiltonian systems: twisted geodesic flows and relative symplectic invariants*, March 2003; Blumental Geometry Lecture Series, Tel Aviv, Israel
48. *Relative almost existence theorem and periodic orbits of twisted geodesic flow*, May 2003; Symplectic Geometry Conference, ETH, Zürich, Switzerland
49. *Periodic orbits of Hamiltonian systems and relative symplectic capacities*, July 2003; KIAS Workshop on Symplectic Geometry and Dynamical Systems, KIAS, Seoul, Korea
50. *Existence and non-existence of periodic orbits of Hamiltonian systems*, September 2003; University of Barcelona, Spain
51. *Existence and non-existence of periodic orbits of Hamiltonian systems*, November 2003; Hong Kong Geometry Colloquium, HKU, Hong Kong
52. *Branching Floer homology*, December 2003; Stony Brook – NYU Joint Symplectic Seminar, SUNY, Stony Brook
53. *Almost existence of periodic orbits of Hamiltonian systems and branching Floer homology*, January 2004; International Workshop on groups, geometry and dynamics in memory of Robert Brooks, Technion, Haifa, Israel
54. *Existence and non-existence of periodic orbits of Hamiltonian systems*, February 2004; Colloquium, University of Toronto, Canada
55. *Branching Floer homology*, May 2004; Workshop on Hamiltonian dynamical systems, CRM, Montreal, Canada
56. *Existence and non-existence of periodic orbits of Hamiltonian systems*, May 2004; Math Colloquium, UCSC
57. *Existence and non-existence of periodic orbits of Hamiltonian systems*, August 2004; Walailak University, Thailand
58. *Branching Floer homology*, November 2004; Informal special semester on symplectic geometry and topology, CRM, Montreal, Canada
59. *Periodic orbits of Hamiltonian systems*, July 2005; Walailak University, Thailand
60. *The algebra of moduli spaces of Morse connecting trajectories*, July 2005; Conference on Poisson Geometry, ICTP, Trieste, Italy
61. *Coisotropic intersections*, March 2006; Stony Brook – NYU Joint Symplectic Seminar, SUNY, Stony Brook

62. *Coisotropic intersections*, June 2006, Poisson 2006, Tokyo, Japan
63. *Geometric quantization, localization and cobordisms of Hamiltonian torus actions*, June 2006, Lecture Series; Geometry and Physics IV: Aspects of Quantization, Hanoi, Vietnam
64. *The Conley conjecture*, March 2007; Symplectic Topology Seminar, CRM, Montreal, Canada
65. *The Conley conjecture: infinitely many periodic points of Hamiltonian diffeomorphisms* March 2007; Colloquium, University of Illinois at Urbana-Champaign, Urbana, IL
66. *The Conley conjecture: infinitely many periodic points of Hamiltonian diffeomorphisms*, April 2007; Workshop “Recent Developments in Symplectic Topology” at the Clay Mathematics Institute, Cambridge, MA
67. *The Conley conjecture: infinitely many periodic points of Hamiltonian diffeomorphisms*, June 2007, Conference “Different approaches to complexity in mathematics and mathematical physics”, Technion, Israel
68. *The Conley conjecture: infinitely many periodic points of Hamiltonian diffeomorphisms*, July 2007, Workshop “Dynamische Systeme”, Oberwolfach, Germany
69. *From Lagrangian to coisotropic intersections*, July 2007; Bogazici Universitesi, Istanbul Center for Mathematical Sciences, Istanbul, Turkey
70. *Periodic orbits of twisted geodesic flows and the Weinstein–Moser theorem*, August 2007; Workshop on Conservative Dynamics and Symplectic Geometry, IMPA, Rio de Janeiro, Brazil
71. *Coisotropic intersections*, September 2007; Conference on Symplectic Geometry and Physics, FIM, ETH, Zürich, Switzerland
72. *Leaf-wise coisotropic intersections*, May 2008; Cornell Topology Festival Ithaca, NY
73. *The Shub-Sullivan theorem and the action gap*, May 2008; Workshop “Floer Theory and Symplectic Dynamics”, CRM, Montreal, Canada
74. *Symplectic geometry of coisotropic submanifolds: displacement, intersections and all that*, June 2008; Conference “Moment Maps”, Centre de Recerca Matemàtica, CRM Barcelona, Spain
75. *Hamiltonian diffeomorphisms with finitely many periodic points*, December 2008; Mini-workshop on Symplectic Topology and Hamiltonian Dynamics Vanderbilt University, Nashville, TN
76. Lecture series: *Periodic orbits of Hamiltonian systems: A symplectic topological perspective and Periodic orbits of Hamiltonian systems: The Conley conjecture*, March 2009; NCKU, Tainan, Taiwan
77. *Differentiating between contact structures: from contact homology to elementary invariants*, July 2009; Bogazici Universitesi, Istanbul Center for Mathematical Sciences, Istanbul, Turkey
78. *Hamiltonian systems with finitely many periodic orbits*, August 2009; Workshop on Conservative Dynamics and Symplectic Geometry, IMPA, Rio de Janeiro, Brasil
79. *Periodic orbits in Hamiltonian dynamics*, August 2009; Symplectic and Contact Geometry Program, Introductory Workshop, MSRI, Berkeley, CA
80. *The Conley conjecture: infinitely many periodic points of Hamiltonian diffeomorphisms*, October 2009, Colloquium, Vanderbilt University, Nashville, TN
81. *The action-index spectrum and periodic orbits of Hamiltonian systems*, October 2009, Illinois–Indiana Symplectic Geometry Conference, Purdue University, West Lafayette, IN

82. *The Maslov class rigidity for coisotropic submanifolds*, January 2010, Workshop on Symplectic Geometry, Contact Geometry and Interactions, Institut Henri Poincaré, Paris, France
83. *Maslov class rigidity for coisotropic submanifolds and Homological resonance relations for Reeb flows and Hamiltonian diffeomorphisms*, April 2010; NCTS, NCKU, Tainan, Taiwan
84. *Coisotropic intersections*, April 2010; Symplectic and Contact Geometry Program, Learning Seminar, MSRI, Berkeley, CA
85. *The Weinstein-Moser theorem and the motion of a change in a magnetic field*, May 2010; Symplectic and Poisson Geometry in Interaction with Algebra, Analysis and Topology, Conference on the occasion of Alan Weinstein's retirement, MSRI, Berkeley, CA
86. *Homological resonance relations for Reeb flows and Hamiltonian diffeomorphisms*, May 2010; Conference on Symplectic Geometry and Physics, Chern Institute of Mathematics, Nankai University, Tianjin, China
87. *Symplectic topology of coisotropic submanifolds*, Minicourse, June 2010; GESTA, IST, Lisbon, Portugal
88. *The Conley conjecture*, June 2010; Hamiltonian Intensive Seminar, UPC, Barcelona, Spain
89. *Periodic orbits of Hamiltonian systems: the Conley conjecture and beyond*, November 2010; From Dynamical Systems to Symplectic Topology, Conference in honor of Edi Zehnder on the occasion of his 70th birthday, ETH, Zürich, Switzerland
90. *Hamiltonian hyperkahler Floer theory*, March 2011, Geometry Seminar, Vanderbilt University, Nashville, TN
91. *Conley conjecture and beyond: infinitely many periodic points of Hamiltonian dynamical systems*, April 2011, Symplectic Geometry Seminar, HKU, Hong Kong
92. *Conley conjecture and beyond: infinitely many periodic points of Hamiltonian dynamical systems*, May 2011; Georgia Topology Conference, University of Georgia, Athens, GA
93. *Conley conjecture and beyond: infinitely many periodic points of Hamiltonian dynamical systems*, May 2011; Colloquium, SUNY, Stony Brook, NY
94. *Homological resonance relations for Hamiltonian dynamical systems*, May 2011; Dynamics Seminar, SUNY, Stony Brook, NY
95. *Conley conjecture and beyond: infinitely many periodic points of Hamiltonian dynamical systems*, July 2011; Bogazici Universitesi, Istanbul Center for Mathematical Sciences, Istanbul, Turkey
96. *Conley conjecture and beyond: infinitely many periodic points of Hamiltonian dynamical systems*, August 2011; Workshop on Conservative Dynamics and Symplectic Geometry, IMPA, Rio de Janeiro, Brasil
97. *Action-index relations for Hamiltonian dynamical systems*, October 2011; Workshop on Symplectic Dynamics, Symplectic Dynamics Program, IAS, Princeton, NJ
98. *Periodic orbits of Hamiltonian systems, quantum cohomology, and resonance relations*, January 2012; Mini-course, NCTS, NCTU, Tainan, Taiwan
99. *Conley conjecture and beyond: infinitely many periodic points of Hamiltonian dynamical systems*, January 2012; NTU, Taipei, Taiwan
100. *Arnold conjecture for Clifford symplectic pencils*, February 2012; Workshop on Hamiltonian Dynamics and Symplectic Topology, Vanderbilt University, Nashville, TN

101. *Closed Reeb orbits on the sphere and symplectically degenerate maxima*, March 2012; Symplectic Dynamics Seminar, Symplectic Dynamics Program, IAS, Princeton, NJ
102. *Action-index relations for Hamiltonian dynamical systems* April 2012; Symplectic Geometry Seminar, ETH, Zürich, Switzerland
103. *Hyperbolic fixed points in Hamiltonian dynamics*, June 2012; Workshop on Interactions Between Algebra and Dynamics in Symplectic Topology, Technion, Haifa, Israel
104. (N12) *Periodic orbits of Hamiltonian systems*, February 2013; Colloquium, ICMAT, Madrid, Spain
105. (N12) *From Hamiltonian dynamics to periodic orbits of Reeb flows*, June 2013; Minicourse, GESTA 2013, Toulouse, France
106. (N12) *Hyperbolic fixed points in Hamiltonian dynamics*, June 2013; D-Days: A Panorama of Geometry. Conference in honor of Dietmar Salamon for his 60th birthday, ETH, Zürich, Switzerland
107. (N12) *Mean Euler characteristic: the degenerate case*, June 2013; Session of Symplectic Geometry and Hamiltonian Dynamics, PRIMA 2013, Shanghai, China
108. (N12) *Periodic orbits of Hamiltonian systems: beyond the Conley conjecture*, July 2013; Symplectic Topology Session, The 6th Pacific RIM Conference on Mathematics 2013, Sapporo, Japan
109. (N12) *Hyperbolic fixed points and periodic orbits of Hamiltonian systems*, July 2013; Workshop “Dynamische Systeme”, Oberwolfach, Germany
110. (N12) *Periodic orbits of Hamiltonian systems*, September 2013; Colloquium, UCF, FL
111. (N12) *Periodic orbits of Hamiltonian systems*, November 2013, Colloquium, UCSC, CA
112. (N12) *The Conley conjecture and beyond*, March 2014; Minicourse, Workshop “Symplectic and Contact Dynamics”, Tel Aviv, Israel
113. (N12) *Periodic orbits of Hamiltonian systems*, April 2015; Colloquium, Santa Clara University, CA
114. (N12) *Periodic orbits of Hamiltonian systems*, May 2014; NCTS (South), Tainan, Taiwan
115. (N12) *Reeb flows, the Conley conjecture, and a charge in a magnetic field*, May 2014; NCTS (South), Tainan, Taiwan
116. (N12) *Hamiltonian and contact dynamics: recent results and open problems*, June 2014; IMBM, Istanbul, Turkey
117. (N12) *Hamiltonian dynamics and symplectic geometry*, July 2014; Lecture Series, Summer School “Escuela JAE de Matemáticas”, ICMAT, Madrid, Spain
118. (N12) *The motion of a charge in a magnetic field*, November 2014; Conference “The Legacy of Vladimir Arnold”, Fields Institute, Toronto, Canada
119. (N12) *My contact homology shopping list*, December 2014; Workshop “Transversality in Contact Homology”, AIM, Palo Alto, CA
120. (N12) *Hamiltonian systems with infinitely many periodic orbits: a homological perspective*, April 2015; Workshop “Low Dimensional Geometric Dynamics”, Centro di Ricerca Matematica Ennio De Giorgi, Pisa, Italy
121. (N12) *Periodic orbits of Hamiltonian systems: conjectures and recent results*, June 2015; Session on Contact and Symplectic Topology, Joint Meeting of the AMS, EMS and SPM, Porto, Portugal

122. (N12) *Non-contractible periodic orbits in Hamiltonian dynamics on closed symplectic manifolds*, August 2015; Workshop on Conservative Dynamics and Symplectic Geometry, IMPA, Rio de Janeiro, Brazil
123. (N12) *Non-contractible periodic orbits in Hamiltonian dynamics on closed symplectic manifolds*, November 2015; East Asian Symplectic Conference, CUHK, Hong Kong
124. (N12) *Lusternik–Schnirelmann theory and closed Reeb orbits*, April 2016; NCTS, Taipei, Taiwan
125. (N12) *Random chain complexes*, May 2016; RIMS, Kyoto, Japan
126. (N12) *Periodic points of Hamiltonian systems: the Conley conjecture and beyond*, May 2016; Minicourse at Tohoku Forum for Creativity, Sendai, Japan
127. (N12) *Lusternik–Schnirelmann theory and closed Reeb orbits*, July 2016; Workshop “Symplectic Geometry and Topology”, ICMS, Edinburgh, UK
128. (N12) *Lusternik–Schnirelmann theory and closed Reeb orbits*, December 2016; Workshop on the minimal number of closed Reeb orbits, Paris, France
129. (N12) *Conley conjecture and Lusternik–Schnirelmann theory*, April 2017; Taiwan Geometry Symposium, NCTS, Taipei, Taiwan
130. (N12) *Lusternik–Schnirelmann theory, the shift operator and closed Reeb orbits*, May 2017; Workshop “Quantitative Symplectic Geometry”, Simons Center for Geometry and Physics, Stony Brook, NY
131. (N12) *Periodic orbits of Hamiltonian Systems: the Conley Conjecture and beyond*, July 2017; Minicourse at “School on Interactions between Dynamical Systems and Partial Differential Equations”, CRM, Barcelona, Spain
132. (N12) *Pseudo-rotations of complex projective spaces*, July 2017; Workshop “Dynamische Systeme”, Oberwolfach, Germany
133. (N12) *On the filtered symplectic homology of prequantization bundles*, August 2017; Workshop on Conservative Dynamics and Symplectic Geometry, IMPA, Rio de Janeiro, Brazil
134. (N12) *Lagrangian Poincaré recurrence and pseudo-rotations*, December 2017; Tsinghua Sanya International Mathematics Forum, Sanya, China
135. (N12) *Dynamics of Hamiltonian pseudo-rotations*, February 2018; Workshop on symplectic dynamics and celestial mechanics, Seoul National University, South Korea
136. (N12) *Periodic orbits of Hamiltonian systems: the Conley conjecture and pseudo-rotations*, March 2018, Colloquium, UCF, FL
137. (N12) *Dynamics of Hamiltonian pseudo-rotations*, April 2018; Workshop “Topological Data Analysis Meets Symplectic Topology”, Tel Aviv University, Israel
138. (N12) *Multiplicity of closed Reeb orbits on prequantization bundles*, May 2018; International Conference on Variational Methods, Chern Institute of Mathematics, Tianjin, China
139. (N12) *Periodic orbits of Hamiltonian systems: the Conley conjecture and pseudo-rotations*, May 2018; Xiamen University, China
140. (N12) *Periodic orbits of Hamiltonian systems: the Conley conjecture and pseudo-rotations*, June 2018, NCKU and NCTS, Tainan, Taiwan
141. (N12) *On the filtered symplectic homology of prequantization bundles*, June 2018, NCKU and NCTS, Tainan, Taiwan

142. (N18) *Periodic orbits of Hamiltonian systems: the Conley conjecture and beyond*, November 2018, Colloquium, University of Hamburg, Germany
143. (N18) *Periodic orbits of Hamiltonian systems: from the Conley conjecture to pseudo-rotations*, November 2018, Minicourse at the “Geometric Dynamics Days”, Giessen, Germany
144. (N18) *Periodic orbits of Hamiltonian systems: the Conley conjecture and beyond*, November 2018, Colloquium, University of Neuchatel, Switzerland
145. (N18) *Periodic orbits of Hamiltonian systems: the Conley conjecture and beyond*, February 2019, Colloque des Sciences Mathématiques du Québec, Montreal, Canada
146. (N18) *Periodic orbits of Hamiltonian systems: from the Conley conjecture to pseudo-rotations*, June-July 2019, Minicourse at the SMS Summer School “Current Trends in Symplectic Topology”, CRM, Montreal, Canada
147. (N18) *Periodic orbits of Hamiltonian systems: the Conley conjecture and pseudo-rotations*, July 2019, Oberseminar, Ruhr-Universität Bochum, Germany
148. (N18) *Approximate identities and almost periodic maps*, Workshop “Conservative Dynamics and Symplectic Geometry”, August 2019, IMPA, Rio de Janeiro, Brazil
149. (N18) *Periodic orbits of Hamiltonian systems: the Conley conjecture, pseudo-rotations and holomorphic curves*; August 2019; Minicourse at the Summer School “Conservative Dynamics and its Interactions & Dynamical Systems”, EPFL, Lausanne, Switzerland
150. (N18) *From pseudo-rotations to holomorphic curves*, November 2019, Floer Memorial Lecture, Northern California Symplectic Geometry Seminar, Berkeley, CA
151. (N18) *Spectral characterization of Besse and Zoll Reeb flows*, December 2019, Workshop “Geometric Methods in Symplectic Topology”, ICMAT, Madrid, Spain
152. (N18) *From symplectic topology to dynamics: topological entropy and Floer theory*, May 2022, IBS Center for Geometry and Physics, Pohang, Korea (Zoom)
153. (N18) *From symplectic topology to dynamics: topological entropy and Floer theory*, May 2022, Colloquium, Jussieu, Sorbonne University, Paris, France
154. (N18) *On the volume of Lagrangian submanifolds*, June 2022, Workshop “Frontiers of Quantitative Symplectic and Contact Geometry”, Institut Mittag-Leffler Stockholm, Sweden
155. (N18) *On the volume of Lagrangian submanifolds*, July 2022, Workshop “Symplectic Dynamics”, IST, Lisbon, Portugal

Service: To Profession

Workshops, Conferences, and Seminars Co-Organized

- *Symplectic Geometry and Mechanics Seminar*, UCSC 2000–2002
- *Workshop New Applications and Generalizations of Floer Theory*, BIRS, Alberta, Canada May 2007
- *Workshop Symplectic Techniques in Conservative Dynamics*, Lorentz Center, Leiden, Netherlands August 2010
- *Workshop Geometrical Methods in Dynamics and Topology*, Hanoi, Vietnam April 2011

- Workshop *GESTA 2011: New Trends in Symplectic and Contact Topology*,
CIEM, Castro Urdiales, Spain June 2011
- Workshop *From Conservative Dynamics to Symplectic and Contact Topology*,
Lorentz Center, Leiden, Netherlands August 2012
- Workshop *Symplectic Techniques in Dynamical Systems*,
ICMAT, Madrid, Spain November 2013
- Workshop *GESTA 2014*,
ICMAT, Madrid, Spain June 2014
- Workshop *Rigidity and flexibility in symplectic topology and dynamics*,
Lorentz Center, Leiden, Netherlands July 2014
- Workshop *Symplectic Techniques in Hamiltonian Dynamics*,
ICMAT, Madrid, Spain June 2016
- Workshop *Hamiltonian and Reeb Dynamics: New Methods and Applications*,
Lorentz Center, Leiden, Netherlands July 2017
- AMS Special Session *Symplectic and Contact Topology and Dynamics*
UCF, Orlando, FL September 2017
- Workshop *Interactions of Symplectic Topology and Dynamics*,
Incontri INdAM, Cortona, Italy July 2019
- Workshop *Symplectic Dynamics Beyond Periodic Orbits*,
Lorentz Center (Online), Leiden, Netherlands July 2020
- Workshop *Symplectic Dynamics Beyond Periodic Orbits*,
Lorentz Center, Leiden, Netherlands August 2022
- *Northern California Symplectic Geometry Seminar*, Berkeley and Stanford 2000–present

Editorial Boards: Journals and Special Issues

- Journal of Modern Dynamics 2015–2022
- *Proceedings of the conference on Geometrical Methods
in Dynamics and Topology, Hanoi, 2011*,
Special Issue, Acta Mathematica Vietnamica, vol. 38, no. 1, 2013 2013
- *Proceedings of GESTA 2011:
New Trends in Symplectic and Contact Topology*,
Special Issue, Geometriae Dedicata, vol. 165, no. 1, 2013 2013

Service: Campus, Division and Department

Campus and Division

- DCAP 2005–2007
- GARP steering committee 2006/07

Department

- Chair 2017–2021
- Graduate Vice Chair 2005–2009, 2012–2015
- Hiring Committee 2007/08(Chair), 2013/14, 2015/16, 2017/18, 2020/21
- Postdoctoral, VAP or Lecturer Hiring Committee 2016/17, 2020/21, 2021/22
- Science Library Committee 1998–2007
- Graduate Admission Committee 1998–2000, 2003–2009, 2016–2022
- Graduate Curriculum Committee 1999–2001
- Temporary Faculty Recruitment Committee 1997–1999
- Putnam Mathematical Competition Committee 1997–1998
- Analysis and/or Geometry Prelim Exam Committee 1996–2000, 2007–2020

Graduate Advising

Graduate Students

- Alexander Golubev; co-advised with R. Montgomery Ph.D. 1998
- Cesar Castilho; co-advised with R. Montgomery Ph.D. 1998
- Junko Hoshi Ph.D. 1999
- Ely Kerman Ph.D. 2000
- Başak Gürel Ph.D. 2003
- Cesar Niche Ph.D. 2006
- Jacqui Espina Ph.D. 2011
- Doris Hein Ph.D. 2012
- Marta Batoreo Ph.D. 2013
- Yusuf Goren Ph.D. 2015
- Jeongmin Shon Ph.D. 2018
- Matthew Grace Ph.D. 2020
- Elijah Fender Ph.D. 2021
- Erman Çineli Ph.D. 2021
- Current Ph.D. students: Mita Banik (graduating Fall 2022), Erol Barut, Rafael Fernandes, John Pelias

Ph.D. Thesis and Oral Exam Committees

- Steve Latif, M.A. thesis committee 1997
- Shinar Korumbaeva, Oral exam committee 1997
- Alexander Golubev, Oral exam committee 1997
- Junko Hoshi, Oral exam committee 1997
- Ely Kerman, Oral exam committee 1998
- Cesar Castilho, Ph.D. thesis committee 1998
- Alexander Golubev, Ph.D. thesis committee 1998
- Junko Hoshi, Ph.D. thesis committee 1999
- Dipankar Ray, Ph.D. thesis committee 1999
- Shinar Korumbaeva, Ph.D. thesis committee 1999
- Ely Kerman, Ph.D. thesis committee 2000
- Graig Gordon, Oral exam committee 2001
- Eric Matsui, Ph.D. thesis committee 2001
- David Raske, Oral exam committee 2002
- John Bruschi, Ph.D. thesis committee 2002
- Başak Gürel, Oral exam committee 2002
- Cesar Niche, Oral exam committee 2002
- Jamey Bass, Oral exam committee 2002
- Harutiun Nishanian, Oral exam committee 2002
- Jose Agapito, Oral exam committee 2003
- Vincent Bonini, Oral exam committee 2003
- Başak Gürel, Ph.D. thesis committee 2003
- Eva Miranda (University of Barcelona, Spain), Ph.D. thesis committee 2003
- Jose Agapito, Ph.D. thesis committee 2004
- Atichart Kettapun, Oral exam committee 2004
- Jamey Bass, Ph.D. thesis committee 2005
- Vince Bonini, Ph.D. thesis committee 2006
- Cesar Niche, Ph.D. thesis committee 2006
- William McCain, Ph.D. thesis committee 2007
- Vidya Swaminathan, Oral exam committee 2007

- Alex Castro, Oral exam committee 2007
- Vidya Swaminathan, Ph.D. thesis committee 2008
- Jacqui Espina, Oral exam committee 2009
- Benoit Tonnelier (L'Ecole Polytechnique, France), Ph.D. thesis committee 2009
- Mark Branson (SUNY, Stony Brook), Ph.D. thesis committee 2010
- Doris Hein, Oral exam committee 2010
- Marta Batoreo, Oral exam committee 2010
- Jacqui Espina, Ph.D. thesis committee 2011
- Michael Khanevsky (Tel Aviv University, Israel), Ph.D. thesis committee 2012
- Doris Hein, Ph.D. thesis committee 2012
- Yusuf Goren, Oral exam committee 2012
- Marta Batoreo, Ph.D. thesis committee [2013](#)
- Roger Casals (ICMAT, Spain), Ph.D. thesis committee [2015](#)
- Yusuf Goren, Ph.D. thesis committee [2015](#)
- Jeongmin Shon, Oral exam committee [2016](#)
- Erman Cineli, Oral exam committee [2017](#)
- Matthew Grace, Oral exam committee [2017](#)
- Alvaro del Pino Gómez (ICMAT, Spain), Ph.D. thesis committee [2017](#)
- Vincent Humilière, Habilitation à Diriger les Recherches Committee;
l'Université Pierre et Marie Curie, Paris, France [2017](#)
- Elijah Fender, Oral exam committee [2018](#)
- Jeongmin Shon, Ph.D. thesis committee [2018](#)
- Gabriel Martins, Ph.D. thesis committee [2018](#)
- Mita Banik, Oral exam committee [2020](#)
- Matthew Salinger, Oral exam committee [2020](#)
- Nathan Marianovsky, Oral exam committee [2020](#)
- Matthew Grace, Ph.D. thesis committee [2020](#)
- John Pelias, Oral exam committee [2021](#)
- Tzu-Mo Kuo, Oral exam committee [2021](#)
- Erman Çineli, Ph.D. thesis committee [2021](#)
- Elijah Fender, Ph.D. thesis committee [2021](#)

Undergraduate Advising

- Krishna Roskin
- Tova Brown

B.A. 2001

B.A. 2005