Contact information:

Department of Mathematics
University of California, Berkeley
815 Evans Hall
Berkeley, CA 94720-3840

Phone: +1 (312) 203-9802
Fax: +1 (510) 642-8204

email: nadler@math.berkeley.edu

Education:

Ph.D. Princeton University, 2001
Thesis title: *Perverse sheaves on real loop Grassmannians*
Thesis adviser: Robert MacPherson, Institute for Advanced Study

B.S. Brown University, 1996
Budapest Semesters in Mathematics, Hungary, Fall 1994-Spring 1995

Employment:

Professor, University of California, Berkeley, Department of Mathematics, Fall 2012–current
Visiting Scientist, Google Brain, 2018–19
Professor, Northwestern University, Department of Mathematics, 2011–12
Associate Professor, Northwestern University, Department of Mathematics, 2008–2011
Assistant Professor, Northwestern University, Department of Mathematics, 2005–2008
L.E. Dickson Instructor, University of Chicago, Department of Mathematics, 2001–2005

Honors:

William J. Spencer Lecture, Kansas State University, Spring 2017
Fall Distinguished Lecture, University of Massachusetts, Amherst, Fall 2017.
Miller Research Professor, Miller Institute, University of California, Berkeley, 2016–2017
Cahit Arf Lecture, Middle East Technical University, Ankara, Turkey, Fall 2012
Andreas Floer Memorial Lecture, Stanford University, Fall 2012
Elected AMS Fellow, Fall 2012
Invited address, Current Events Bulletin, Joint Mathematics Meetings, New Orleans,
    Winter 2011
Clarence Ver Steeg Graduate Faculty Award, Northwestern University, 2009
Invited address, AMS Central Section Meeting, Western Michigan University, Fall 2008
Alfred P. Sloan Research Fellowship, Northwestern University, 2007–2009
NSF Postdoctoral Research Fellowship, University of Chicago, 2002–2005
NSF Graduate Research Fellowship, Princeton University, 1997–2000
David Howell Premium for Excellence in Mathematics, Brown University, 1996
Phi Beta Kappa, Brown University, 1996

Research support:

Principal investigator, Singularities and sheaves in symplectic geometry and geometric representation theory, NSF DMS grant #1802373, 2018–current

Principal investigator, Microlocal geometry in gauge theory, NSF DMS grant #1502178, 2015–2018

Principal investigator, Quantum topological structures in geometric representation theory, NSF DMS grant #1201319/#1319287, 2012–2015

Co-principal investigator, FRG: Collaborative Research: In and Around Theory X, NSF DMS grant #1160227, 2012–2016

Principal investigator, Representation theory via topological field theory, NSF DMS grant #0901114, 2009–2012

Co-principal investigator, SQuaRE grant, American Institute of Mathematics, 2008-2014

Member, Research Training Group in Geometry and Physics, NSF DMS grant #0636646, principal investigators: E. Getzler, B. Tsygan, E. Zaslow, 2007–2012

Principal investigator, Perverse sheaves in representation theory, NSF DMS grant #0600909, 2006–2009

Recipient of support from DARPA Geometric Langlands grant R0011-04-1-0031, principal investigators: E. Frenkel, D. Gaitsgory, M. Goresky, K. Vilonen, 1996

Papers and preprints:

1. D. Nadler and V. Shende, *Sheaf quantization in Weinstein manifolds*, preprint, ...

2. T.H. Chen and D. Nadler, *Real and symmetric matrices*, preprint, arXiv:2006.10279.

3. D. Nadler, *A microlocal criterion for commuting nearby cycles*, preprint, arXiv:2003.11477.

4. D. Alvarez-Gavela, Y. Eliashberg, and D. Nadler, *Geomorphology of Lagrangian ridges*, preprint, arXiv:1912.03439.

5. D. Nadler, *Wall-crossing for toric mutations*, to appear in Journal of Gökova Geometry Topology (special issue in memory of Sir Michael Atiyah), arXiv:1806.01381

6. T.H. Chen and D. Nadler, *Kostant-Sekiguchi homeomorphisms*, preprint, arXiv:1805.06564.

7. T.H. Chen and D. Nadler, *Affine Matsuki correspondence for sheaves*, preprint, arXiv:1805.06514.

8. D. Ben-Zvi, S. Gunningham, and D. Nadler, *The character field theory and homology of character varieties*, Math. Research Letters, Volume 26 (2019), Number 5, 1313–1342, arXiv:1705.04266.

9. B. Gammage and D. Nadler, *Mirror symmetry for honeycombs*, Trans. Amer. Math. Soc. 373 (2020), 71–107, arXiv:1702.03255.

10. D. Nadler and Z. Yun, *Spectral action in Betti Geometric Langlands*, Israel J. of Math. 232, 299–349 (2019), arXiv:1611.04078.

11. D. Nadler and Z. Yun, *Geometric Langlands correspondence for $SL(2), PGL(2)$ over the pair of pants*, Compositio Math. 155 (2019) 324–371, arXiv:1610.08398.

12. D. Ben-Zvi and D. Nadler, *Betti Geometric Langlands*, Algebraic geometry: Salt Lake City 2015, AMS Proceedings of symposia in pure mathematics, vol. 97, part 2. arXiv:1606.08523.

13. D.Nadler, *Wrapped microlocal sheaves on pairs of pants*, preprint, arXiv:1604.00114.

14. D. Ben-Zvi and D. Nadler, *Betti spectral gluing*, preprint, arXiv:1602.07379.

15. D. Nadler, *Mirror symmetry for the Landau-Ginzburg A-model $M = \mathbf{C}^n, W = z_1...z_n$*, Duke Math. J. 168 (2019), no. 1, 1–84, arXiv:1601.02977.

16. P. Li and D. Nadler, *Uniformization of semistable bundles on elliptic curves*, preprint, arXiv:1510.08762.

17. D. Nadler, *A combinatorial calculation of the Landau-Ginzburg model $M = \mathbf{C}^3, W = z_1 z_2 z_3$*, Selecta Math. 23 (2017), no. 1, pp 519–532, arXiv:1507.08735.

18. D. Nadler *Non-characteristic expansions of Legendrian singularities*, preprint, arXiv:1507.01513.

19. D. Ben-Zvi, D. Nadler, and A. Preygel, *Integral transforms for coherent sheaves*, J. Eur. Math. Soc. 19 (2017), Issue 12, 3763–3812, arXiv:1312.7164.

20. D. Ben-Zvi, D. Nadler, and A. Preygel, *A spectral incarnation of affine character sheaves*, Compositio Math. 153 (9), 1908–1944, arXiv:1312.7163.

21. D. Nadler, *Arboreal singularities*, Geometry & Topology 21 (2017) 1231–1274, arXiv:1309.4122.

22. D. Nadler, *Cyclic symmetries of A_n-quiver representations*, Advances in Math. 269 (2015), 346–363, arXiv:1306.0070.

23. D. Ben-Zvi and D. Nadler, *Secondary traces*, preprint, arXiv:1305.717.

24. D. Ben-Zvi and D. Nadler, *Nonlinear traces*, to appear in États de la Recherche: Derived Algebraic Geometry. *Panoramas et Synthèses*, Societé Math. de France., arXiv:1305.7175.

25. D. Ben-Zvi and D. Nadler, *Elliptic Springer Theory*, Compositio Math. 151 (2015) no. 8, 1568–1584, arXiv:1302.7053.

26. D. Ben-Zvi, J. Francis, and D. Nadler, *Morita equivalence for convolution categories*: Appendix to arXiv:0805.0157, preprint, arXiv:1209.0193.

27. D. Ben-Zvi and D. Nadler, *Beilinson-Bernstein localization over the Harish Chandra center*, preprint, arXiv:1209.0188.

28. D. Nadler, *Fukaya categories as categorical Morse homology*, SIGMA 10 (2014), 018, 47 pages, arXiv:1109.4848.

29. D. Nadler and H. Tanaka, *A stable oo-category of Lagrangian cobordisms*, Advances in Mathematics 366 (2020), 107026, arXiv:1109.4835.

30. D. Nadler, *The Geometric Nature of the Fundamental Lemma*, Bull. Amer. Math. Soc. 49 (2012), 1–50, arXiv:1009.1862.

31. D. Ben-Zvi and D. Nadler, *Loop Spaces and Representations*, Duke Math. J. 162 (2013), no. 9, 1587–1619, arXiv:1004.5120.

32. D. Ben-Zvi and D. Nadler, *Loop Spaces and Connections*, J. Topology (2012) 5(2): 377–430, arXiv:1002.3636.

33. D. Ben-Zvi and D. Nadler, *The Character Theory of a Complex Group*, preprint, arXiv:0904.1247.

34. D. Nadler, *Springer theory via the Hitchin fibration*, Compositio Math. 147 (2011), no. 5, 1635–1670, arXiv:0806.4566.

35. D. Ben-Zvi, J. Francis, and D. Nadler, *Integral Transforms and Drinfeld Centers in Derived Algebraic Geometry*, J. Amer. Math. Soc. 23 (2010), 909–966, arXiv:0805.0157.

36. D. Ben-Zvi and D. Nadler, *Loop Spaces and Langlands Parameters*, preprint, arXiv:0706.0322.

37. D. Nadler, *Microlocal branes are constructible sheaves*, Selecta Math. 15 (2009), no. 4, 563–619, arXiv:math/0612399.

38. D. Gaitsgory and D. Nadler, *Spherical varieties and Langlands duality*, Moscow Math. J. 10 (2010), no. 1, (Special Issue: In honor of Pierre Deligne), 65–137, arXiv:math/0611323.

39. D. Nadler, *Morse theory and tilting sheaves*, Pure App. Math. Q. 2 (2006), no. 3, (Special Issue: In honor of Robert MacPherson, Part 1 of 3), 83–108, arXiv:math/0604428.

40. D. Nadler and E. Zaslow, *Constructible Sheaves and the Fukaya Category*, J. Amer. Math. Soc. 22 (2009), 233–286, arXiv:math/0604379.

41. D. Gaitsgory and D. Nadler, *Hecke operators on quasimaps into horospherical varieties*, Documenta Math. 14 (2009) 19–46, arXiv:math/0411266.

42. M. Emerton, D. Nadler, and Kari Vilonen, *A geometric Jacquet functor*, Duke Math. J. 125 (2004), no. 2, 267–278, arXiv:math/0311339.

43. D. Nadler, *Matsuki correspondence for the affine Grassmannian*, Duke Math. J. 124 (2004), no. 3, 421–457, arXiv:math/0301091.

44. D. Nadler, *Perverse Sheaves on Real Loop Grassmannians*, Invent. Math. 159 (2005), no. 1, 1–73, arXiv:math/0202150.

45. D. Nadler and S. Yakovenko, *Oscillation and boundary curvature of holomorphic curves in* $\mathbf{C}^n$, Math. Res. Lett. 5 (1998), 137–148.

46. D. Nadler, *Minimal 2-fold coverings of* $\mathbf{E}^d$, Geom. Dedicata 65 (1997), 305–312.

Ph.D. students supervised:

University of California, Berkeley:

Daniel Chupin, current.
Yixuan Li, current.
Tahsin Saffat, current.
German Stefanich, current.
Ben Gammage, *Microlocal sheaves and mirror symmetry*, 2019.
Shishir Agrawal, *Deformations of overconvergent isocrystals*, 2018.
Harrison Chen, *A localization theorem for derived loop spaces and periodic cyclic homology*, 2018.
Alex Zorn, *A combinatorial model of Lagrangian skeleta*, 2018.
Daniel Appel, *Real bundles on the projective line*, 2017.
Qiao Zhou, *Applications of toric geometry to geometric representation theory*, 2017.
Penghui Li, *Uniformization of semistable bundles on elliptic curves*, 2016.
Xin Jin, *Symplectic approaches in geometric representation theory*, 2015.

Northwestern University:

Chris Elliott (joint with K. Costello), *Gauge theoretic aspects of the geometric Langlands correspondence*, 2016.
Clemens Koppensteiner, *Some microlocal aspects of perverse coherent sheaves and equivariant D-modules*, 2015.
Sam Gunningham, *Categorified harmonic analysis on complex reductive groups*, 2013.
Ian Le, *Higher laminations and affine buildings*, 2013.
Ted Stadnik, *Constructions using differential operators in positive characteristic*, 2012.
Mike Skirvin, *A global analogue of the Springer resolution for* SL_2, 2012.
Thomas Dunlap, *Combinatorial representation theory of affine* SL_2 *via polytope calculus*, 2010.

Masters students supervised:

University of California, Berkeley:

James McIvor, *Towards the Grothendieck-Teichmuller Group of a Split Extension*, 2017.

Undergraduate research mentored:

University of California, Berkeley:

Frank Fan, Abhishek Shivkumar, *Higgs bundles*, Summer 2020.
Sam Hsu, *Honors thesis: The More General Adjoint $(\infty, 1)$-Functor*, Fall 2019–Spring 2020.
Nikhil Sahoo, *Honors thesis: Morse Theory and the h-Cobordism Theorem*,
　　Fall 2019–Spring 2020.
SURF Research Group, *Schubert Calculus Through Toric Geometry*, Summer 2019.
Weiyi Liu, *Honors thesis: Projective geometry*, Fall 2015–Spring 2017.
Brian Gluzman, *Algebraic Geometry*, Summer 2014.
Weiqiao Han, *Honors thesis: An Elementary Introduction to the Riemann Zeta Function
　　and some of its Applications*, Spring 2014.
Jize Yu, *Representation theory*, Summer 2013.
Yusuf Baris Kartal, *Loop groups*, Summer 2013.

Northwestern University:

Frederick Robinson, *Honors thesis: Persistent homology*, 2012.
Andrea Heyman, *Honors thesis: Lefschetz fixed point theorem*, 2010.
Adam Vollrath, *Honors thesis: Elliptic curves*, 2009.
Jonah Leshin, *Honors thesis: Tate's thesis*, 2008.
Jonah Leshin, *Analytic Number Theory*, Summer 2007.
Durga Borkar, *Hecke Algebras*, Summer 2006.

Professional service:

Editor, Journal of Algebraic Geometry, 2019–current

Co-organizer, MSRI semester program: Higher Categories and Categorification,
　　Spring 2020

Co-organizer, MSRI semester program: Derived Algebraic Geometry, Spring 2019

Co-organizer, AIM weeklong workshop: Arborealization of Singularities of Lagrangian
　　Skeleta, March 2018

Co-organizer, BIRS weeklong program: Geometric Unification from Six-Dimensional
　　Physics, May 2015

Co-organizer, weeklong graduate workshop: Mathematical Applications of Six-Dimensional
　　Physics, Berkeley, December 2014

Co-organizer, MSRI semester program: Geometric Representation Theory, Fall 2014

Co-organizer, weeklong graduate workshop: Gauge Theory, Northwestern, January 2012

Organizer, Special Session, American Mathematical Society, Fall Central Section Meeting,
　　Western Michigan University, October 2008

Peer review of journal articles and grant proposals.

University of California, Berkeley:

L&S Executive Committee: 2019–current

University of California, Berkeley, Department of Mathematics:

Mathematics Opportunity Committee (M.O.C.): 2017-2018 (Chair)

Committee Omega: 2017-2018 (Chair), 2018-19

Faculty Appointments Committee: 2013-2014, 2014-2015, 2015-2016, 2016-2017, 2019-2020

Prizes Committee: 2015-2016 (Chair), 2018-19

Graduate Admissions Committee: 2012-2013

Preliminary Exam Committee: 2012-2013

Northwestern University, Department of Mathematics:

Tenure-track and Tenured Hiring Committee: 2007-2008, 2009-2010, 2010-2011

Boas Assistant Professorship Hiring Committee: 2006-2007, 2008-2009 (Chair), 2009-2010 (Chair), 2010-2011 (Chair)

Graduate Committee: 2005-2006, 2010-2011

Budget Committee: 2008-2009, 2009-2010

Pinsky Lecture Series Committee: 2009-2010

Invited talks:

Lagrangian "Exit" Paths, Online seminar, MSRI, May 2020.
Verlinde formulas in Betti Geometric Langlands, Mathematical physics seminar, Northwestern, February 2020.
Arboreal skeleta, Winter school on symplectic geometry, SYSU, Guangzhou, January 2020.
Arboreal skeleta, Fukaya category and homological mirror symmetry, Peking University, Beijing, August 2019.
Higher ribbon graphs, String Math, Uppsala, Sweden, July 2019.
Arboreal skeleta of Weinstein manifolds, Homological Algebra, Microlocal Analysis and Symplectic Geometry, CRM, Montreal, June 2019.
Real and symmetric matrices, Homological Mirror Symmetry, HSE, Moscow, May 2019.
Degenerating eigenvalues, SE Lie Theory workshop, LSU, May 2019.
Loop spaces and connections, DAG Learning Seminar, MSRI, May 2019.
E_3-centers, DAG Learning Seminar, MSRI, April 2019.
Traces, characters, and… loops?, Algebra and Number Theory Day, Johns Hopkins, April 2019.
Categorical traces in representation theory, Hot Topics: Recent progress in Langlands Program, MSRI, April 2019.
What kind of an invariant are microlocal sheaves?, Categorical Symplectic Topology Conference, Cambridge, UK, March 2019.
A user's guide to derived stacks, DAG Learning Seminar, MSRI, March 2019.
Kostant–Sekiguchi homeomorphisms, Workshop on GRT: Geometric Satake and Beyond, TSIMF, Sanya, China, October 2018.
Cutting and gluing branes, Higher Algebra and Mathematical Physics, Perimeter, Waterloo, August 2018.

Betti Geometric Langlands, Thematic Program on Arithmetic Geometry and Quantum Field Theory, KIAS, Seoul, July 2018.

Kostant-Sekiguchi homeomorphisms, Gökova Geometry-Topology Conference, May 2018.

Arboreal singularities, Arborealization of singularities of Lagrangian skeleta, AIM, May 2018.

Higher ribbon graphs, Fall Distinguished Lecture, UMass, Amherst, November 2017.

Betti Geometric Langlands, StringMath seminar, Berkeley, October 2017.

Symmetries of quiver representations, Foundations Of Machine Learning seminar, Google Research, July 2017.

Higher ribbon graphs, William J. Spencer Lecture, Kansas State, March 2017.

Higher ribbon graphs, Mathematics Department colloquium, UCLA, February 2017.

Symmetry and Singularities, Miller Institute, Berkeley, November 2016.

Arboreal singularities, Geometric Langlands seminar, Chicago, October 2016.

Lagrangian singularities, Geometric Representation Theory and Beyond, Clay Research Workshop, Oxford, September 2016.

Landau-Ginzburg models, IBS CGP, POSTECH, South Korea, September 2016.

Singularities in symplectic geometry, IBS CGP, POSTECH, South Korea, September 2016.

Arboreal singularities, "Arborealization Day", Stanford, July 2016.

Betti Langlands in genus one, Perverse sheaves of categories, IHES, July 2016.

Arboreal singularities, Symplectic topology, sheaves and mirror symmetry, Paris-Jussieu, July 2016.

Mirror symmetry for pairs of pants, Symplectic Duality and Gauge Theory, Perimeter Institute, April 2016.

Wrapped microlocal sheaves on pairs of pants, Mirror Symmetry and Wall-Crossing, UC Berkeley, March 2016.

Singularities of Lagrangian skeleta, Symplectic Geometry seminar, Stanford, February 2016.

Combinatorics of microlocal sheaves, Lecture series, Arithmetic aspects of moduli spaces, Bernoulli Center, January 2016.

Geometric Hecke operators for real groups, Higgs bundles, real groups, Langlands duality and mirror symmetry, Bernoulli Center, January 2016.

Real geometric Langlands in genus zero, Higgs bundles, real groups, Langlands duality and mirror symmetry, Bernoulli Center, January 2016.

Back in black: geometry's payment plan to number theory, Breakthrough Prize Symposium, Berkeley, November 2015.

Applications of arboreal singularities, Inaugural Conference, Simons Collaboration on Homological Mirror Symmetry, Penn, November 2015.

Real Geometric Langlands, Spectral data for Higgs bundles, AIM, October 2015.

Arboreal Singularities, Factorizable Structures in Topology and Algebraic Geometry, BIRS, August 2015.

Arboreal Singularities, AMS Summer Institute in Algebraic Geometry, Utah, July 2015.

Examples of Betti Langlands, Geometric Unification from Six-Dimensional Physics, BIRS, May 2015.

Arboreal Singularities, Berkeley Math-Physics Meeting, April 2015.

Betti Langlands in genus one, Geometric Langlands and derived algebraic geometry, CIRM, Luminy, April 2015.

D-modules in Representation Theory, Computational algebraic geometry seminar, Berkeley, December 2014.

Combinatorics of microlocal sheaves, Geometric Representation Theory, RIMS, Kyoto, July 2014.

Elliptic character sheaves, Lecture series, Geometric Representation Theory, RIMS, Kyoto, July 2014.

Elliptic character sheaves, Representation Theory, Integrable Systems and Quantum Fields, Northwestern, May 2014.

Affine Character Sheaves, Families of Automorphic Forms and the Trace Formula, Simons Symposium, Puerto Rico, January 2014.

Theory X on a 4-torus, Mathematics of Superconformal Field Theory, Aspen Center for Physics, July 2013.

Geometry of Hecke categories, Lecture series, New Geometric Techniques in Number Theory, MSRI, July 2013.

Morita theory of the affine Hecke category, Lie groups, Lie algebras and their representations, Oregon, April 2013.

Elliptic representation theory, Mathematics Department colloquium, Oregon, April 2013.

Elliptic representation theory, Mathematics Department colloquium, USC, April 2013.

Stable Legendrian skeleta, Joint LA topology seminar, UCLA, April 2013.

Morita theory of the affine Hecke category, Interactions between Noncommutative Algebra, Representation Theory, and Algebraic Geometry, MSRI, April 2013.

Morita theory of the affine Hecke category, Noncommutative algebra seminar, MSRI, March 2013.

Traces and loops, Istanbul Center for Mathematical Sciences (IMBM), Bogazici University, Istanbul, Turkey, November 2012.

Traces and loops, Cahit Arf Lecture, Middle East Technical University, Ankara, Turkey, November 2012.

Traces and loops, Mathematics Department colloquium, Berkeley, October 2012.

Traces and loops, Fields Medal Symposium, Fields Institute, October 2012.

What is Geometric Representation Theory?, Mentor Lecture Series, Berkeley, October 2012.

Lagrangian cobordisms, Topology seminar, Berkeley, October 2012.

Singular support of Lagrangian branes, Andreas Floer Memorial Lecture, Stanford, October 2012.

Hecke operators in Geometric Langlands, Lecture series, Albert-Ludwigs-Universitat Freiburg, Germany, July-August 2012.

Elliptic Character Sheaves, Algebraic Topology, Field Theory and Strings, Simons Center, May 2012.

Fukaya categories as categorical Morse homology, Spring School on Algebraic Microlocal Analysis, Northwestern, May 2012.

Character sheaves for loop groups, Algebraic geometry seminar, UIC, October 2011.

Character sheaves for loop groups, Geometry, Representation Theory and Applications, Berkeley, September 2011.

Elliptic Springer Theory, Nonperturbative Effects and Dualities in QFT and Integrable Systems, KITP, August 2011.

A stable infinity-category of Lagrangian cobordisms, Equivariant Quantum Cohomology, Mirror Symmetry, and Symplectic Geometry, Simons Center, May 2011.

A stable infinity-category of Lagrangian cobordisms, Sheaf-Theoretic Methods in Symplectic Topology, IAS, May 2011.

Elliptic Springer Theory, Representation theory, geometry and combinatorics joint seminar, Berkeley, March 2011.

The Geometric Nature of the Fundamental Lemma, Current Events Bulletin, Joint Mathematics Meetings, New Orleans, January 2011.

Traces in geometry, Lecture series, Hebrew University, December 2010.

A Trinity of Quantizations, Mathematics Department colloquium, Stanford, November 2010.

Loop spaces in derived algebraic geometry, Berkeley-Stanford Algebraic Geometry Colloquium, Stanford, November 2010.

A Trinity of Quantizations, Mathematics Department colloquium, Berkeley, October 2010.

The Fundamental Lemma, Lead speaker at workshop organized by J. Kamnitzer and C. Mautner, Duntroon, Ontario, August 2010.

Traces in geometry, Discrete and continuous geometries, an undergraduate conference, Northwestern, June 2010.

D-modules in representation theory via loop spaces, Lecture series, Geometric Langlands seminar, Chicago, April 2010.

Geometry of character sheaves, Macdonald Polynomials & Geometry, Clay Mathematics Institute, March 2010.

Integral transforms in derived algebraic geometry, Algebraic geometry seminar, Columbia, December 2009.

Perspectives on D-modules, Mathematics Department colloquium, Minnesota, November 2009.

Integral transforms in derived algebraic geometry, Geometric Langlands seminar, Chicago, October-November 2009.

Representation theory via topological field theory, New Contexts in Homotopy Theory: A conference in honor of Peter May on the occasion of his 70th birthday, Chicago, October 2009.

Representation theory via topological field theory, Lecture series, Manifolds, Strings and 2D Quantum Field Theory, Harvard, August 2009.

Character theory of a complex group, Topological Field Theories, Northwestern, May 2009.

Loop spaces in representation theory, American Mathematical Society, Spring Central Section Meeting, UIUC, March 2009.

Homotopical algebra of character sheaves, Representation theory seminar, Chicago, March 2009.

Microlocal branes, Quantum Algebra related to various Topological Field Theories, Kyoto, February 2009.

3d TFT and character sheaves, Topology seminar, MIT, December 2008.

Microlocal branes, Thursday seminar, Harvard, December 2008.

Representation theory via topological field theory, Invited address, American Mathematical Society, Fall Central Section Meeting, Western Michigan U. October 2008.

A-branes and Hitchin fibers, Gauge Theory and Langlands Duality, KITP, July 2008.

Introduction to Hecke functors and geometric Satake, Gauge Theory and Langlands Duality, KITP, July 2008.

Loop spaces in representation theory, Conference in honor of Nemmers Prize winner Robert Langlands, Northwesternm May 2008.

Some aspects of the geometric Langlands program, Conference in honor of Nemmers Prize winner Robert Langlands, Northwestern, May 2008.

Real groups, Hecke algebras, Langlands program workshop, Northwestern, May 2008.

Representation theory via topological field theory, Midwest Topology Conference, Northwestern, May 2008.

Real groups via base change, Geometric representation theory seminar, IAS, April 2008.

Representation theory via topological field theory, Mathematics Department colloquium, Penn, April 2008.

Springer theory for symplectic geometers, Symplectic Geometry seminar, Columbia, March 2008.

Loop spaces in representation theory, Mathematics Department colloquium, SUNY, Stonybrook, March 2008.

Langlands duality for real groups, Algebro-Geometric Derived Categories and Applications, IAS, March 2008.

Loop spaces in representation theory, Lecture series, Homological Mirror Symmetry and Related Topics, University of Miami, January 2008.

Loop spaces in representation theory, Algebraic Geometry seminar, IAS. February 2008.

Microlocal branes in representation theory, Geometry and Physics seminar, Michigan, December 2007.

Springer theory for symplectic geometers, Geometry seminar, Boston University, November 2007.

Springer theory for symplectic geometers, Symplectic Geometry seminar, MIT, November 2007.

Langlands duality and topological field theory, Quantum Geometry, Aspen Center for Physics, July 2007.

Langlands-Vogan-Mirror Duality, Noncommutative Geometry, Northwestern, May 2007.

Derived Geometric Satake Correspondence, Buildings and Combinatorial Representation Theory, AIM, March 2007.

Loop spaces and Langlands parameters, Representation Theory seminar, Berkeley, April 2007.

Loop spaces and Langlands parameters, Algebraic Geometry seminar, Wisconsin, April 2007.

Loop spaces and Langlands parameters, Lie Groups seminar, MIT, April 2007.

Constructible sheaves and the Fukaya category, Lecture series, Geometric Langlands seminar, Chicago, February 2007.

Microlocal branes, Geometric Langlands and Physics, ESI, Vienna, January 2007.

Morse Theory and Graphs, Graduate Student seminar, Northwestern, January 2006.

Loop spaces and Langlands duality, Representation Theory seminar, Michigan, February 2005.

Loop spaces and Langlands duality, Representation Theory seminar, UIUC, February 2005.

Loop spaces and Langlands duality, Representation Theory seminar, Rutgers, February 2005.

Loop spaces and Langlands duality, Mathematics Department seminar, Northwestern, January 2005.

Loop spaces and Langlands duality, Mathematics Department colloquium, Toronto, January 2005.

Loop spaces and Langlands duality, Geometry seminar, Texas, Austin, January 2005.

Loop spaces and Langlands duality, Representation Theory seminar, Wisconsin, November 2004.

Loop spaces and Langlands duality, Representation Theory seminar, Notre Dame, November 2004.

Real groups and geometric Langlands, American Mathematical Society, Fall Central Section Meeting, Northwestern, October 2004.

Loop spaces and Langlands duality, Representation Theory seminar, Maryland, April 2004.

An elementary model of fusion, Representation Theory seminar, Chicago, March 2004.

Real loop Grassmannians, DARPA Geometric Langlands meeting, Chicago, November 2003.

Affine Grassmannians and Langlands duality, Midwest Workshop in Lie theory, Representation Theory and Automorphic Forms, Notre Dame, April 2002.

Perverse sheaves on real loop Grassmannians, Geometric Langlands seminar, Chicago, April 2002.

Lecture series on loop Grassmannians, Mathematics Department seminar, Wisconsin, March 2000.

Perverse sheaves on real loop Grassmannians, Representation Theory seminar, UMass, Amherst, October 2000.

Beilinson-Drinfeld Grassmannians, Representation Theory seminar, IAS, April 1999.