

ERIC ZASLOW

Department of Mathematics
Northwestern University
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Research Areas

Differential, Algebraic and Enumerative Geometry, Mirror Symmetry, String Theory.

Education

Harvard University, Ph.D., Physics, 1995.

Harvard University, M.A. (*en route*), Physics, 1990.

Dartmouth College, A.M., Physics, 1989.

Dartmouth College, A.B., Mathematics and Physics double major, 1989.

Appointments

Associate Professor of Mathematics, **Northwestern** University, 2002—.

Visiting Member, The Fields Institute, 2004—.

Assistant Professor (math), **Northwestern** University, 1998–2002.

Postdoctoral Fellow (math), **Harvard** University, 1995–1998.

Visiting Assistant Professor of Physics, **Dartmouth** College, 1995.

Advisors and Advisees

Graduate Advisor: Cumrun Vafa (Harvard, physics)

Postdoctoral Advisor: Shing-Tung Yau (Harvard, math)

Graduate Student Advisee: Marco Aldi

Postgraduate Advisees: Sema Salur, Jiun-Cheng Chen, Cheol-Hyun Cho.

Honors and Awards

Clay Senior Scholar, \$20,000 award, 2004–2005.

P.I. for NSF Grant DMS-0405859, “Geometry of Mirror Symmetry,” \$116,000, 2004–2007.

Co-P.I. for NSF-DMS-0401953, “Geometry and Topology of Mirror Symmetry,” \$30,000, 2004.

Faculty Honor Role (Northwestern), 2003.

Weinberg College (Northwestern) Distinguished Teaching Award, 2001.

Alfred P. Sloan Foundation Fellowship, \$40,000, 2000–2004

P.I. for NSF-DMS-0072504, “Unifying Mirror Symmetry,” \$85,000, 2000–2004

Hertz Foundation Graduate Fellowship, 1989–1995.

Service

Organized: Geometry and Topology of String Theory (Emphasis Year program and conference at Northwestern, 2004), Geometry of Lagrangian Submanifolds (IPAM, 2003), Great Lakes Geometry Conference (Northwestern, 2001), Duality Workshop (KITP, 2001).

University Committees: Curricular Policy Committee, Ad Hoc Promotion and Tenure Committee, Goldwater Scholarship Committee, ISP Committee, search committees in physics and school of education; served on many committees within math department.

Courses Taught: Calculus, Differential Equations, Group Theory and Complex Analysis, Fourier Series, Complex Manifolds, Riemann Surfaces, Mirror Symmetry.

Other

I am very active in the sport of ultimate. I serve on the Board of Directors of the Ultimate Players Association. I have written *Ultimate: Tactics and Techniques* (Human Kinetics). As a player I have won five world or national championships.

Publications

1. M. Aldi and E. Zaslow, “Seidel’s Mirror Map for Abelian Varieties,” in preparation.
2. E. Zaslow, “Seidel’s Mirror Map for the Torus,” math.SG/0506359.
3. E. Zaslow, “Phsymatics,” published on the Website of the Clay Mathematics Institute, claymath.org; physics/0506153.
4. M. Aldi and E. Zaslow, “Coisotropic Branes, Noncommutativity, and the Mirror Correspondence,” JHEP 0506:019,2005; hep-th/0501247.
5. J. Loftin, S.-T. Yau, and E. Zaslow, “Affine Manifolds, SYZ Geometry, and the ‘Y’ Vertex,” math.DG/0405061; to appear in Journal of Differential Geometry.
6. A. Abrams, H. Landau, Z. Landau, J. Pommersheim, and E. Zaslow, “Random Multiplication Approaches Uniform Measure in Finite Groups,” math.PR/0410569.
7. A. Abrams, H. Landau, Z. Landau, J. Pommersheim, and E. Zaslow, “Optimal Estimators,” preprint.
8. S. Gukov, S.-T. Yau, and E. Zaslow, “Duality and Fibrations of G_2 Manifolds,” Turkish Journal of Mathematics **27** (2003) 61-97; hep-th/0203217.
9. T. Graber and E. Zaslow, “Open-String Gromov-Witten Invariants: Calculations and a Mirror ‘Theorem’,” in *Orbifolds in Mathematics and Physics* (Madison, WI, 2001), 107–121, Contemp. Math. **310**, AMS, Providence, RI, 2002.
10. *Mirror Symmetry*. Clay Mathematics Monographs, Vol. **1**, Cumrun Vafa and Eric Zaslow, eds., AMS-CMI, Providence, 2003. (This book received a featured review in Math Reviews.)
11. N.-C. Leung, S.-T. Yau, and E. Zaslow, “From Special Lagrangian to Hermitian-Yang-Mills via Real Fourier-Mukai Transform,” math.DG/0005118; in *Winter School on Mirror Symmetry, Vector Bundles and Lagrangian Submanifolds*, C. Vafa and S.-T. Yau, eds., AMS and International Press, Boston, 2001.
12. A. Abrams, H. Landau, Z. Landau, J. Pommersheim, and E. Zaslow, “An Iterated Random Function with Lipschitz Number One,” to be published in *Theory of Probability and its Applications*.
13. A. Klemm and E. Zaslow, “Local Mirror Symmetry at Higher Genus,” hep-th/9906046; in *Winter School on Mirror Symmetry, Vector Bundles and Lagrangian Submanifolds*, C. Vafa and S.-T. Yau, eds., AMS and International Press, Boston, 2001.
14. A. Abrams, H. Landau, Z. Landau, J. Pommersheim, and E. Zaslow, “Evasive Random Walks and the Clairvoyant Demon,” *Random Structures & Algorithms* **20** (2002) 239-248.
15. T.-M. Chiang, A. Klemm, S.-T. Yau, and E. Zaslow, “Local Mirror Symmetry: Calculations and Interpretations,” hep-th/9903053; *Advances in Theoretical and Mathematical Physics* **3** (1999).
16. A. Polishchuk and E. Zaslow, “Categorical Mirror Symmetry: The Elliptic Curve,” *Advances in Theoretical and Mathematical Physics* **2** (1998) 443-470; math.AG/9801119.
17. A. Strominger, S.-T. Yau, and E. Zaslow, “Mirror Symmetry is T-Duality,” *Nuclear Physics* **B479** (1996) 243-259; hep-th/9606040.
18. Shing-Tung Yau and Eric Zaslow, “BPS States as Symplectic Invariants from String Theory,” in *Geometry and Physics*, Proceedings of the Special Session on Geometry and Physics, Aarhus, Denmark, 1996.
19. Shing-Tung Yau and Eric Zaslow, “BPS States, String Duality, and Nodal Curves on $K3$,” *Nuclear Physics* **B471** (1996), hep-th/9512121.
20. S. Sethi, M. Stern, and E. Zaslow, “Monopole and Dyon Bound States in $N=2$ Supersymmetric Yang-Mills Theories,” *Nuclear Physics* **B457** (1995) 484.
21. E. Zaslow, “Solitons and Helices: The Search for a Math-Physics Bridge,” *Communications in Mathematical Physics* **175** (1996) 337.
22. E. Zaslow, “Dynkin Diagrams of \mathbf{CP}^1 Orbifolds,” *Nuclear Physics* **B415** (1994) 155.
23. E. Zaslow, “Topological Orbifold Models and Quantum Cohomology Rings,” *Communications in Mathematical Physics* **156** (1993) 301.
24. L. Balents, R. D. Kamien, P. Le Doussal, and E. Zaslow, “On the Isotropic-Nematic Transition for Polymers in Liquid Crystals,” *Journal de Physique* **2** (1992) 263.