

ALAN WOLF, PH.D., J.D.

Professor & Chair of Physics
The Cooper Union for the Advancement of Science and Art
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EDUCATION

J.D., 1994
Benjamin N. Cardozo Law School (Yeshiva University)

Ph.D., Physics, 1983
University of Texas, Austin

M.A., Physics, 1980
University of Texas, Austin

B.S., Physics, 1978
SUNY, Stony Brook

SCIENTIFIC AND ADMINISTRATIVE EXPERIENCE

The Cooper Union, New York, NY

Chairman of Physics, 2005–present

Professor of Physics, 1999–present

Associate Professor of Physics, 1993–1998

Assistant Professor of Physics, 1984–1992

Acting Dean of Engineering, 2012–2013

Campus-wide Safety Coordinator, 2008–2017

Member, Curriculum Committee, 2005–present

Member, Academic Standards Committee, 2005–2017

Research in nonlinear dynamics

Expert witness (testifying and non-testifying)

University of Texas, Austin, Texas

Postdoctoral researcher, Department of Physics, 1983

PROFESSIONAL ACTIVITIES

Member, American Physical Society

Peer review for Physical Review, Physical Review Letters, Physica D, Chaos

SCIENTIFIC PUBLICATIONS

“Computing Lyapunov exponents from experimental data” (with J. Swift, H.L. Swinney, J.A. Vastano), *Physica* 16D, 285, 1985. (As of 2018, cited approximately 10,000 times).

“Universal power spectra for the reverse bifurcation sequence” (with J. Swift), *Phys. Lett.* 83A, 184, 1981.

“Impracticality of box-counting algorithms for calculating the dimensionality of strange attractors” (with H.S. Greenside, J. Swift, T. Pignaturo), *Phys. Rev. A* 25, 3453, 1982.

“One-dimensional dynamics in a multicomponent chemical reaction” (with R.H. Simoyi, H.L. Swinney), *Phys. Rev. Lett.* 49, 245, 1982.

“Low-dimensional chaos in a hydrodynamic system” (with A. Brandstater, H.L. Swinney, J.D. Farmer, E. Jen, J.P. Crutchfield), *Phys. Rev. Lett.* 51,1442, 1983.

“A strange attractor in a Couette-Taylor experiment” (with A. Brandstater, J. Swift, H.L. Swinney) *Turbulence and Chaotic Phenomena in Fluids*, ed. T. Tatsumi, North Holland, Amsterdam, 1983.

“Simplicity and universality in the transition to chaos,” *Nature*, 315, 182, 198.

“Progress in computing Lyapunov exponents from experimental data” (with J. Swift), *Statistical Physics and Chaos in Fusion Plasmas*, ed. W. Horton and L. Reichl, Wiley, New York, 1984.

“Detecting and Quantifying Chaos in Experimental Data,” 16mm film with sound, University of Texas/Department of Energy production, 1984.

“Quantifying Chaos with Lyapunov Exponents” textbook chapter in *Nonlinear Science: Theory and Applications*, Vol. 1, ed. Arun Holden, Manchester University Press, 1986.

“Intermediate length scale effects in Lyapunov exponent estimation” (with J.A. Vastano), Los Alamos conference on dimensions and entropies, Springer Verlag, 1985.

“Chaos and the Solar Cycle” (with E. Spiegel), *Chaotic Phenomena in Astrophysics: Annals of the New York Academy of Sciences*, Vol. 497, 1987.

“Diagnosing Chaos in the Space Circle” (with T. Bessoir), *Physica* 50D, 1991.

“Electric Field Line Diagrams Don’t Work” (with S. Van Hook, E. Weeks), *Am. J. Phys.* 64(6), 714, 1996.

ALAN WOLF, PH.D., J.D.

LEGAL EXPERIENCE

Admitted to the Southern District of New York,
December 30, 2003

Bar # AW8186

Passed April, 2001 Bar Exam to practice before the
U.S. Patent & Trademark Office

Registration Number 48,411

Adjunct Professor of Law, Benjamin N. Cardozo School of Law,
1997–2010

Special Master in the Silicone Breast Implant Litigation

- Appointed in the New York cases, April 3, 1996,
Honorable Jack Weinstein, E.D.N.Y.

- Appointed in Multidistrict Litigation 926, May 30, 1996,
Honorable Samuel Pointer, N.D. Ala.

Law Clerk to the Honorable Lawrence M. McKenna,
SDNY, September 1994–August 1995

Served while on academic leave from Cooper Union

Admitted to the New York Bar, February 6, 1995

Honorable Jack Weinstein, Eastern District of NY, Spring 1993
Alexander Fellow—served as a full-time (40 hour/week)
legal intern

Debevoise & Plimpton, Summer 1993

Summer Associate—corporate and international tax,
mental health law

LEGAL PUBLICATION

“Shepard’s and KeyCite Are Flawed” (with Lynn Wishart),
NYS Bar Ass’n J., September 2003, p. 24

ENTREPRENEURSHIP

Invention Factory™—Co-Founder (with Prof. Eric Lima) and
Faculty Member: 2013–present (at The Cooper Union)

Syracuse University (starting 2017) “Invent@SU”

Indian Institute of Technology (starting 2018) “Invent@IITGN”

“The Invention Factory—Fostering Innovation in Freshman and
Sophomore Engineering Students” (with Eric Lima), Proceedings
of the 7th First Year Engineering Experience Conference,
August 2015, Roanoke, VA

U.S. Patent (with Eric Lima) 9,232,769

“Method and Apparatus for Automatically Dispensing Wet Pet
Food.” Issued January 12, 2016

HONORS AND AWARDS

The Cooper Union New York, NY

Recipient, Edwin Sharp Burdell Award, 1990

Recipient, Menschel Research grant, 2000

Benjamin N. Cardozo School of Law/Yeshiva University

New York, NY

Graduate, Magna Cum Laude

C.J.S. Prize for Excellence in Contracts

Law Review Invitee

Jacob Burns Scholarship, 1992–1994

Alexander Fellow, Spring 1993

University of Texas Austin, Texas

University of Texas Fellow, 1979, 1980, 1982

Richard N. Lane Prize in Classical Physics, 1981

SUNY, Stony Brook Stony Brook, NY

Departmental Honors in Physics, 1978

TEACHING EXPERIENCE

The Cooper Union

Physics I: Ph112 (Mechanics)

Physics II: Ph213 (Waves and Electromagnetic Theory)

Physics III: Ph214 (Optics and Modern Physics)

Physics Lab: Ph291

Deterministic Chaos with Engineering Applications: Ph429

Scientific Photography: Ph360

Physics Simulations: Ph235

Microcontroller Projects in Physics: Ph215

Patent Law: EID373

Legal and Ethical Aspects of Engineering: EID276

Cardozo Law School

Patent Law

Patent Litigation

Elements of Law

Science in the Courtroom

CURATOR PUBLIC EXHIBITIONS

“Interference Patterns” (Celebrating the Centennial of the
Michelson-Morley Experiment) (with Ellen Lupton), 1988

“Numbers” (with Ellen Lupton), 1989

“How Do We Look? Photographs by Engineering Students,” 2012