

CURRICULUM VITAE OF RICHARD S. ELLIS

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EDUCATION

1969 B.A., Harvard University
1971 M.S., New York University
1972 Ph.D., New York University

PROFESSIONAL APPOINTMENTS IN MATHEMATICS

1972–1975 Assistant Professor, Northwestern University
1975–1977 Assistant Professor, University of Massachusetts Amherst
1977–1981 Associate Professor, University of Massachusetts Amherst
1981– Professor, University of Massachusetts Amherst

ADDITIONAL APPOINTMENT IN JUDAIC STUDIES

1998– Adjunct Professor in the Department of Judaic and Near
Eastern Studies, University of Massachusetts Amherst

INVITED TALKS

(1) Mathematics Colloquium at University of Wisconsin, Madison, WI, October 11, 1972: “Limit theorems for model Boltzmann equations with several conserved quantities.”

(2) Mathematics Colloquium at Indiana University, Bloomington, IN, February 19, 1975: “Limit theorems for the linearized Boltzmann equation.”

(3) Mathematics Colloquium at Brown University, Providence, RI, October 17, 1975: “Limit theorems for the linearized Boltzmann equation.”

(4) Joint New England Probability Seminar at Massachusetts Institute of Technology, Cambridge, MA, October 29, 1975: “Correlation inequalities in equilibrium statistical mechanics.”

(5) Mathematics Colloquium at Rensselaer Polytechnic Institute, Troy, NY, January 19, 1976: “From transport processes to the linearized Boltzmann equation: a set of related asymptotic problems.”

(6) Mathematics Colloquium at Dartmouth College, Hanover, NH, January 21, 1976: “Transport processes and the Boltzmann equation.”

(7) Mathematical Physics Colloquium at Harvard University, Cambridge, MA, April 16, 1976: “Necessary and sufficient conditions for the GHS inequality with applications to analysis.”

(8) Mathematical Physics Colloquium at Harvard University, Cambridge, MA, September 29, 1976: “Limit theorems for a class of generalized Ising models.”

(9) Mathematics Colloquium at Indiana University, Bloomington, IN, November 15, 1976: “A notion of entropy and connections with probability.”

(10) Probability Seminar at University of Wisconsin, Madison, WI, November 17, 1976: “Correlation inequalities.”

(11) Probability Seminar at University of Wisconsin, Madison, WI, November 18, 1976: “Limit theorems for a class of generalized Ising models near the critical point.”

(12) Mathematical Physics Colloquium at Harvard University, Cambridge, MA, November 24, 1976: “Limit theorems for a class of generalized Ising models, II.”

(13) Joint New England Probability Seminar at Massachusetts Institute of Technology, Cambridge, MA, April 11, 1977: “Limit theorems for sums of dependent random variables occurring in statistical mechanics.”

(14) Probability Seminar at Cornell University, Ithaca, NY, September 11, 1978: “Probabilistic aspects of phase transitions and metastability.”

(15) Probability Seminar at Northwestern University, Evanston, IL, September 21, 1978: “Probabilistic aspects of phase transitions and metastability.”

(16) Probability Seminar at University of Wisconsin, Madison, WI, September 25, 1978: “Probabilistic aspects of phase transitions and metastability.”

(17) Colloquium in Mathematics Research Center at University of Wisconsin, Madison, WI, September 26, 1978: “The Legendre transformation with applications to probability and statistical mechanics.”

(18) Nonlinear Analysis Seminar at University of Minnesota, MN, Minnesota, September 28, 1978: “The Legendre transformation with applications to probability and statistical mechanics.”

(19) Probability Seminar at University of Minnesota, Minneapolis, MN, September 29, 1978: “Probabilistic aspects of phase transitions and metastability.”

(20) Special Seminar in Department of Mathematics at University of California, Berkeley, CA, October 16, 1978: “Probabilistic aspects of phase transitions and metastability.”

(21) Statistics Colloquium at Stanford University, Stanford, CA, October 19, 1978: “Correlation inequalities with applications to probability and statistical mechanics.”

(22) Two talks in Probability Seminar at University of California, Los Angeles, CA, October 24, 1978 and October 26, 1978: “Probabilistic aspects of phase transitions and metastability” and “The Legendre transformation with applications to probability and statistical mechanics.”

(23) Mathematics Colloquium at University of New Mexico, Albuquerque, NM, November 7, 1978: “The Legendre transformation with applications to probability and statistical mechanics.”

(24) Colloquium at Los Alamos Scientific Laboratory, Los Alamos, NM, November 9, 1978: “Probabilistic aspects of phase transitions and metastability.”

(25) Mathematics Colloquium at New Mexico State University, Las Cruces, NM, November 14, 1978: “The Legendre transformation with applications to probability and statistical mechanics.”

(26) Statistics Colloquium at Florida State University, Tallahassee, FL, November 20, 1978: “Correlation inequalities with applications to probability and statistical mechanics.”

(27) Probability Colloquium at New York University, New York City, NY, February 22, 1979: “Limit theorems for sums of dependent random variables occurring in statistical mechanics.”

(28) Mathematics Colloquium at Worcester Polytechnic Institute, Worcester, MA, May 7, 1980: “Approximate delta functions, nonlinear functionals, and statistical mechanics.”

(29) Probability Colloquium at New York University, New York City, NY, May 14, 1980: “Asymptotic expansions of Gaussian integrals with a manifold of minimum points.”

(30) Mathematics Colloquium at Dartmouth College, Hanover, NH, May 6, 1981: “The law of large numbers and a derivation of thermodynamics.”

(31) Three talks at University of Arizona, Tucson, AZ, September 14–18, 1981: “Entropy, gambling, and asymptotic problems in probability theory” (Mathematics Colloquium); “The law of large numbers, thermodynamics, and phase transitions” (Probability Colloquium); “Symmetry breaking and random waves for magnetic systems on a circle” (Mathematical Physics Colloquium).

(32) Mathematics Colloquium at Hebrew University, Jerusalem, Israel, February 11, 1982: “Entropy, gambling, and asymptotic problems in probability theory.”

(33) Mathematics Colloquium at Technion – Israel Institute of Technology, Haifa, Israel, March 1, 1982: “Entropy, gambling, and asymptotic problems in probability theory.”

(34) Mathematics Colloquium at Weizmann Institute of Science, Rehovot, Israel, May 4, 1982: “Entropy, gambling, and asymptotic problems in probability theory.”

(35) Statistics Colloquium at Tel Aviv University, Ramat-Aviv, Israel, May 10, 1982: “Entropy, gambling, and asymptotic problems in probability theory.”

(36) Physics Colloquium at Technion – Israel Institute of Technology, Haifa, Israel, May 18, 1982: “Symmetry breaking and random waves for magnetic systems on a circle.”

(37) Stochastic Systems Seminar in Division of Applied Mathematics at Brown University, Providence, RI, October 26, 1982: “Large deviations for dependent random vectors.”

(38) Probability Seminar at New York University, New York City, NY, March 16, 1983: “Phase transitions and large deviations for some models of magnetism.”

(39) Probability Seminar at Tufts University, Medford, MA, March 1, 1985: “Large deviations and statistical mechanics.”

(40) Mathematics Colloquium at University of California, Irvine, CA, March 21, 1985: “Large deviations and statistical mechanics.”

(41) Probability Seminar at Technion – Israel Institute of Technology, Haifa, Israel, March 4, 1986: “Large deviations and statistical mechanics.”

(42) Mathematics Colloquium at Hebrew University, Jerusalem, Israel, March 13, 1986: “Large deviations and statistical mechanics.”

(43) Probability Colloquium at Case Western Reserve University, Cleveland, OH, December 4, 1986: “Exponential decay of probabilities in ferromagnetic systems.”

(44) Probability Seminar at New York University, New York City, NY, December 17, 1986: “Exponential decay of probabilities in ferromagnetic systems.”

(45) Seminar at AT&T Bell Laboratories, Murray Hill, NJ, May 27, 1987: “Large deviations for Markov chains with applications.”

(46) Probability Seminar at Technical University of Berlin, West Germany, July 17, 1987: “Large deviations for Markov chains.”

(47) Seminar on Asymptotic Problems for Stochastic Processes in Division of Applied Mathematics at Brown University, Providence, RI, March 10, 1988: “A unified approach to large deviations for Markov chains.”

(48) Stochastics Systems Seminar in Division of Applied Mathematics at Brown University, Providence, RI, February 6, 1989: “Large deviations for a class of jump Markov processes that model queueing networks.”

(49) Statistics Seminar in Center for Stochastic Processes at University of North Carolina, Chapel Hill, NC, February 13, 1989: “Large deviations for a class of jump Markov processes that model queueing networks.”

(50) Probability Seminar at University of Maryland, College Park, MD, February 15, 1989: “Large deviations, phase transitions, and limit theorems for statistical mechanical models.”

(51) Seminar in Institute for Applied Mathematics at University of Heidelberg, Heidelberg, West Germany, March 27, 1989: “Large deviations for a class of jump Markov processes that model queueing networks.”

(52) Probability Seminar at Technion – Israel Institute of Technology, Haifa, Israel, April 4, 1989: “Large deviations for Markov processes with discontinuous statistics.”

(53) Communication Network Seminar in Department of Electrical Engineering at Technion – Israel Institute of Technology, Haifa, Israel, May 23, 1989: “Large deviations for a class of jump Markov processes that model queueing networks.”

(54) Statistics Seminar at Hebrew University, Jerusalem, Israel, May 29, 1989: “Large deviations for a class of jump Markov processes that model queueing networks.”

(55) Seminar at AT&T Bell Laboratories, Murray Hill, NJ, September 12, 1989: “Large deviations for a class of jump Markov processes that model queueing networks.”

(56) Two talks in Department of Mathematics, Statistics, and Computer Science at Dalhousie University, Halifax, NS, Canada, October 30, 1989 and October 31, 1989: “Large deviations for a class of jump Markov processes that model queueing networks” (Mathematics Colloquium) and “Large deviations, phase transitions, and limit theorems for statistical mechanical models” (Probability Seminar).

(57) Joint Harvard–MIT Probability Seminar, Cambridge, MA, October 4, 1990: “Large deviations for Markov processes with discontinuous statistics.”

(58) Probability/Statistical Mechanics Seminar at New York University, New York City, NY, January 24, 1991: “Large deviations for Markov processes with discontinuous statistics.”

(59) Statistics Seminar at Yale University, New Haven, CT, April 19, 1993: “A weak convergence approach to the theory of large deviations.”

(60) Two talks in Department of Mathematical Statistics at University of Stockholm, Stockholm, Sweden, September 21, 1993 and September 22, 1993: “A weak convergence approach to the theory of large deviations.”

(61) Probability and Stochastic Processes Seminar in Department of Electrical Engineering at Technion – Israel Institute of Technology, Haifa, Israel, May 30, 1995: “A weak convergence approach to the theory of large deviations.”

(62) Mathematical Physics Seminar at University College Dublin, Dublin, Ireland, April 2, 1996: “Large deviations and applications to statistical mechanics.”

(63) Mathematics Colloquium at Dublin City University, Dublin, Ireland, April 10, 1996: “A weak convergence approach to the theory of large deviations.”

(64) Two talks at Dublin Institute for Advanced Studies, Dublin, Ireland, April 11–12, 1996: “Large deviation analysis of queueing systems.”

(65) Special talk for Nonequilibrium Statistical Mechanics Group in Center for Nonlinear Studies at Los Alamos National Laboratory, Los Alamos, NM, May 13, 1998: “Relative entropy, large deviations, and statistical mechanics” (part 2).

(66) Physics Colloquium at University of Rome, Rome, Italy, June 30, 1999: “The theory of large deviations: from Boltzmann’s 1877 calculation to equilibrium macrostates in 2D turbulence.”

(67) Mathematics Colloquium at University of Rome, Rome, Italy, July 1, 1999: “Equivalence of pure and mixed ensembles for models of two dimensional turbulence, the nonlinear Schrödinger equation, and other models in statistical mechanics.”

(68) Mathematical Physics Colloquium at Rutgers University, New Brunswick, NJ, November 12, 1999: “The theory of large deviations: from Boltzmann’s 1877 calculation to maximum entropy principles in 2D turbulence.”

(69) Two talks in Institute for Applied Mathematics at University of Zurich, Zurich, Switzerland, June 18, 2001 and June 22, 2001: “Statistical theories of turbulence: a source of fundamental mathematical problems.”

(70) Talk in Department of Mathematics at University of Munich and sequel in Department of Mathematics at Technical University of Munich, Munich, Germany, June 25, 2001 and June 26, 2001: “Statistical theories of turbulence: a source of fundamental mathematical problems.”

(71) Two talks in Probability Seminar at Swiss Federal Institute of Technology, Lausanne, Switzerland, June 18, 2002 and June 20, 2002: “Analysis of statistical theories of turbulence via large deviations and convex analysis” and “Analysis of statistical models of geostrophic turbulence.”

(72) Two talks in Department of Mathematics at University of Paris VI, Paris, France, June 25, 2002 and June 26, 2002: “Analysis of statistical theories of turbulence via large deviations and convex analysis” and “Analysis of statistical models of geostrophic turbulence.”

(73) Mathematical Physics Colloquium at Rutgers University, New Brunswick, NJ, March 13, 2003: “Nonequivalence of ensembles and phase transitions in statistical mechanical models.”

(74) Mathematics Colloquium at Adam Mickiewicz University, Poznan, Poland, May 20, 2003: “Entropy, large deviations, and statistical mechanics.”

(75) Berlin Stochastics Colloquium (joint with Technical University, Humboldt University, and the Weierstrass Institute), Berlin, Germany, June 23, 2004: “Global optimization, generalized canonical ensembles, and universal ensemble equivalence.”

(76) Seminar in Probability and Stochastic Processes at Technion – Israel Institute of Technology, Haifa, Israel, June 27, 2006: “Double-Chai (18·2) limit theorems for sums of dependent random variables occurring in statistical mechanics.”

(77) Mathematics Seminar at University of Rome, Rome, Italy, June 30, 2009: : “From large deviations to statistical mechanics: what is the most likely way for an unlikely event to happen?”

(78) Statistics and Probability Seminar at Boston University, Boston, MA October 29, 2009: : “From large deviations to statistical mechanics: what is the most likely way for an unlikely event to happen?”

(79) Mathematics Colloquium at Oregon State University, Corvallis, OR, February 15, 2010: : “From large deviations to statistical mechanics: what is the most likely way for an unlikely event to happen?”

(80) University Convocation at Willamette University, Salem, OR, February 18, 2010: talk on my forthcoming book *Blinding Pain, Simple Truth: Changing Your Life Through Buddhist Meditation*.

(81) Mathematics Colloquium at University of Athens in Athens, Greece, April 20, 2010: “From large deviations to statistical mechanics: what is the most likely way for an unlikely event to happen?”

(82) Mathematics Colloquium at Technion – Israel Institute of Technology, Haifa, Israel, April 26, 2010: : “From large deviations to statistical mechanics: what is the most likely way for an unlikely event to happen?”

(83) Berlin Probability Colloquium (joint with Technical University Berlin, Humboldt University, and Weierstrass Institute for Applied Analysis and Stochastics), Berlin, Germany, June 30, 2010: “From large deviations to statistical mechanics: what is the most likely way for an unlikely event to happen?”

(84) Stochastics Seminar in Institute of Mathematics at Budapest University of Technology and Economics, Budapest, Hungary, June 30, 2011: : “From large deviations to statistical mechanics: what is the most likely way for an unlikely event to happen?”

(85) Probability Seminar at Cornell University, Ithaca, NY, May 7, 2012: : “From large deviations to statistical mechanics: what is the most likely way for an unlikely event to happen?”

(86) Mathematics Colloquium at Boğaziçi University, Istanbul, Turkey, July 2, 2012: : “From large deviations to statistical mechanics: what is the most likely way for an unlikely event to happen?”

(87) Talk in College of Public Health at Ohio State University, Columbus, OH, March 18, 2013: “Healing the Stress of Academic Life.”

(88) Joint Mathematics-Statistics Seminar at Ohio State University, Columbus, OH, March 19, 2013: “From large deviations to statistical mechanics: what is the most likely way for an unlikely event to happen?”

(89) Center for Nonlinear Analysis Seminar at Carnegie Mellon University, Pittsburgh, PA, August 22, 2013: “From large deviations to statistical mechanics: what is the most likely way for an unlikely event to happen?”

(90) Physics Seminar at Brandeis University, Waltham, MA, February 12, 2014: “From Statistical Mechanics to Large Deviations: “What Is the Most Likely Way for an Unlikely Event To Happen?”

(91) Talk in Department of Mathematics at University of Illinois in Urbana-Champaign, IL, March 17, 2014: “Healing the Stress of Academic Life”

(92) Probability Seminar at University of Illinois, Urbana-Champaign, IL, March 18, 2014: “From Large Deviations to Statistical Mechanics: “What Is the Most Likely Way for an Unlikely Event To Happen?”

(93) CEMAT’s Open Seminar in Center for Mathematics and Its Applications at Instituto Superior Técnico, Lisbon, Portugal, May 28, 2014: “What Is the Most Likely Way for an Unlikely Event To Happen?”

CONFERENCES ATTENDED AND TALKS DELIVERED

(1) Twelfth Joint Automatic Control Conference, St. Louis, Missouri, August 12, 1971: “An application of stochastic optimal control theory to the optimal rescheduling of airplanes.”

(2) Meeting of the American Mathematical Society, New York City, NY, April 20, 1973: “Limit theorems for model Boltzmann equations with several conserved quantities.”

(3) Conference on Statistical Mechanics at the Mathematics Research Institute, Oberwolfach, West Germany, July 10, 1973: “Limit theorems for model Boltzmann equations with several conserved quantities.”

(4) Meeting of the American Mathematical Society, San Francisco, CA, January 15, 1974: “Chapman-Enskog-Hilbert expansion for the Ornstein-Uhlenbeck process and the approximation of Brownian motion.”

(5) Conference on Probabilistic Methods in Differential Equations, University of Victoria, Victoria, BC, Canada, August 20, 1974: “Limit theorems for the linearized Boltzmann equation.”

(6) Meeting of the American Mathematical Society, New York City, NY, March 26, 1975: “Concavity of magnetization for a class of even ferromagnets.” I chaired a session of ten-minute contributed papers in Probability and Statistics at this meeting.

(7) Meeting of the American Mathematical Society, Cambridge, MA, October 23, 1975: “Applications of the GHS inequality to probability and analysis.”

(8) Statistical Mechanics Conference at Yeshiva University, New York City, NY, December 8, 1975: “Necessary and sufficient conditions for the GHS inequality with applications to differential equations.”

(9) Special session on Inequalities in Mathematical Physics at American Mathematical Society meeting, University of Illinois, Urbana, IL, March 19, 1976: “Necessary and sufficient conditions for the GHS inequality with applications to differential equations.”

(10) Conference on Interacting Particle Systems at the Mathematics Research Institute, Oberwolfach, West Germany, October 17–23, 1976: “Limit theorems for a class of generalized Ising models near the critical point.”

(11) Conference on Recent Developments in Kinetic Theories at Virginia Polytechnic Institute and State University, Blacksburg, VA, May 31–June 2, 1976: “Limit theorems for the linearized Boltzmann equation.”

(12) Statistical Mechanics Conference at Yeshiva University, New York City, NY, December 6, 1976: “Limit theorems for a class of generalized Ising models near the critical point.”

(13) Statistical Mechanics Conference at Yeshiva University, New York City, NY, May 9, 1977: “Gaussian quadrature and critical measures in mean field theory.”

(14) Special session on Probability Theory Inspired by Applications at American Mathematical Society meeting, New York City, NY, April 19, 1978: “The asymptotics of certain random fields defined on a circle.”

(15) Colloquium on Random Fields: Rigorous Results in Statistical Mechanics and Quantum Field Theory (sponsored by Bolyai János Mathematical Society), Esztergom, Hungary, June 24–30, 1979: “The asymptotics of certain random fields defined on a circle.”

(16) Statistical Mechanics Conference at Rutgers University, New Brunswick, NJ, December 13, 1979: “Asymptotics of Gaussian integrals.”

(17) Statistical Mechanics Conference at Rutgers University, New Brunswick, NJ, November 20, 1980: “The GHS inequality for large external field.”

(18) Joint Summer Research Conference in the Mathematical Sciences on the Mathematics of Phase Transitions at Bowdoin College, Brunswick, ME, June 24–30, 1984: “Large deviations and statistical mechanics.”

(19) Annual Meeting of the Institute of Mathematical Statistics, Lake Tahoe, CA, August 21–24, 1984: “Large deviations and statistical mechanics.”

(20) Two talks in Symposium on Large Deviations and Their Applications at Oxford University, Oxford, England, March 23–28, 1986: “Large deviations and statistical mechanics.”

(21) Annual meeting of Israel Statistical Association at the Hebrew University, Jerusalem, Israel, May 20, 1986: “Large deviations and statistical mechanics.”

(22) Statistical Mechanics Conference at Rutgers University, New Brunswick, NJ, December 19, 1986: “Exponential decay of probabilities in ferromagnetic systems.”

(23) Two talks in Workshop on Asymptotic Methods for Stochastic Systems, University of Maryland, College Park, MD, October 25–27, 1987: “Large deviations for Markov processes: recent developments” and “Applications of large deviations to some problems in statistical mechanics.”

(24) Second International Ascona/Locarno Conference on Stochastic Processes, Physics and Geometry, Ascona, Switzerland, July 4–9, 1988: “A unified approach to large deviations for Markov chains and applications to statistical mechanics.”

(25) Workshop on Applications of Large Deviations at the Institute for Applied Mathematics at University of Heidelberg, Heidelberg, West Germany, July 25–29, 1988: “Large deviations and phase transitions in some statistical mechanical models.”

(26) Conference on Theory of Large Deviations at the Mathematics Research Institute, Oberwolfach, West Germany, July 31–August 6, 1988: “A unified approach to large deviations for Markov chains.”

(27) Conference on Large Deviations and Applications at the Mathematics Research Institute, Oberwolfach, Germany, November 29–December 5, 1992: “A stochastic optimal control approach to the theory of large deviations.”

(28) 1993 Institute of Mathematical Statistics Workshop on Applications of Large Deviation Theory, August 7–8, 1993, Stanford University, Stanford, California: “Large deviations and phase transitions in statistical mechanics.”

(29) Symposium in Commemoration of the Centennial of the Birth of Harald Cramér, September 24–25, 1993, University of Stockholm, Stockholm, Sweden: “Large deviation theory and its applications.”

(30) Five College Faculty Workshop on the Teaching of Introductory Science, June 1, 1994, Smith College, Northampton, Massachusetts: “The transition from lower level to upper level mathematics courses (Math 300 at the University of Massachusetts).”

(31) Joint American Mathematical Society–Israel Mathematical Union meeting, Special Session on Stochastic Dynamics, May 24–26, 1995, Hebrew University, Jerusalem, Israel: “Large deviation analysis of queueing systems.”

(32) Two talks at Seventeenth Midwest Probability Colloquium, supplementary program on “Large Deviations and Weak Convergence,” October 19, 1995, Northwestern University, Evanston, IL: “Sanov's Theorem” (RSE), “Large deviation analysis of queueing systems.” Paul Dupuis also gave a talk on “Computations.”

(33) Winter Workshop of Berlin Graduate School in Probability, Berlin, Germany, March 17, 1998: “Large deviations for Markov processes with discontinuous statistics” and “Derivation of maximum entropy principles in two-dimensional turbulence via large deviations.”

(34) Conference on Predictability: Quantifying Uncertainty in Models of Complex Phenomena at Los Alamos National Laboratory, Los Alamos, NM, May 11–15, 1998: “Relative entropy, large deviations, and statistical mechanics.”

(35) The Second Annual DOE/MICS Workshop on Predictability of Complex Systems, Albuquerque, NM, October 28–29, 1998: “Probabilistic techniques in the study of statistical theories of turbulence.”

(36) The Third Annual DOE/MICS Workshop on Predictability of Complex Systems at Los Alamos National Laboratory, Los Alamos, NM, December 6–8, 1999: “Equivalence of ensembles for models of 2D turbulence and related models.”

(37) Asymptotic Problems in Stochastic Processes and PDE's: a conference celebrating the 65th birthday of Mark I. Freidlin, University of Maryland, College Park, MD, May 29–31, 2003: “Relationships of solutions of constrained and unconstrained minimization problems with applications to nonequivalence of ensembles in statistical mechanics.”

(38) Florence Meeting on Long-Range Interactions and Ensemble Inequivalence, University of Florence, Florence, Italy, June 28–29, 2005: “Global optimization, the Gaussian ensemble, and universal ensemble equivalence.”

(39) Probability, Geometry and Integrable Systems: a conference honoring the 75th birthday of Henry McKean, Mathematical Sciences Research Institute, Berkeley, CA, December 5–9, 2005. Although I was invited to give a talk and I had material to talk on, I declined because the schedule was full and I wanted to give younger people the opportunity to speak.

(40) I was the main speaker at the International Seminar on Extreme Events in Complex Dynamics, held during the week October 23–27, 2006 at the Max Planck Institute for Physics of Complex Systems in Dresden, Germany. At the seminar I delivered an eight-hour lecture series entitled “The Theory of Large Deviations and Applications to Statistical Mechanics.”

(41) Workshop on Dynamics and Thermodynamics of Systems with Long Range Interactions: Theory and Experiments, July 4–8, 2007, Assisi, Italy: “Ginzburg-Landau Polynomials and the Asymptotic Behavior of the Magnetization in the Neighborhood of a Tricritical Point.” I was also a member of the International Advisory Committee for the workshop.

(42) I was an invited lecturer at École d'Été de Physique Theorique in Les Houches, France. The aim of this summer school was to present recent developments in the theoretical and experimental study of long-range, interacting systems. Twelve lecturers, approximately sixty graduate and postdoctoral students, and a number of other visitors participated. My lectures, given during the period August 5–8, 2008, were entitled “The Theory of Large Deviations and Applications to Statistical Mechanics.”

RESEARCH INVITATIONS

(1) Guest Professor at the Institute for Applied Mathematics, University of Heidelberg, Heidelberg, West Germany, July 1981. Lecture series (eight lectures) entitled “Entropy and asymptotic problems in probability theory and statistical mechanics.”

(2) Participant in the Institute for Mathematics and Its Applications at the University of Minnesota, Minneapolis, Minnesota, May 1983. Two lectures delivered (May 24 and 26).

(3) Participant in the Institute for Mathematics and Its Applications at the University of Minnesota, Minneapolis, Minnesota, November 11–14, 1985, Workshop on Large Deviations. One lecture delivered (November 11): “Large deviations and statistical mechanics.”

(4) Department of Mathematics, ETH, and Department of Physics, University of Zurich, Zurich, Switzerland, June 29–July 3, 1987. Two lectures delivered (June 29 and July 1).

(5) Guest Professor at the Institute for Applied Mathematics at University of Heidelberg, Heidelberg, West Germany, July 6–24, 1987. Three lectures delivered (July 6, 9, and 13).

(6) I gave an invited postgraduate course (Troisième Cycle de la Physique) at University of Lausanne, Lausanne, Switzerland, June 27–July 15, 1988: “Large deviations and applications to statistical mechanics” (four lectures of three hours each).

(7) Institute of Mathematics, Russian Academy of Sciences, Novosibirsk, Russia, August 6–14, 1997. Two lectures delivered (August 8 and 11).

NATIONAL SCIENCE FOUNDATION GRANTS

1973–1975	Northwestern University, Grant GP-28576.
1975–1976	Northwestern University, Grant MPS-0828A04.
1976–1978	University of Massachusetts, Grant MCS76-06644.
1978–1980	University of Massachusetts, Grant MCS76-06644 A01.
1980–1983	University of Massachusetts, Grant MCS-8002149.
1981–1982	Sabbatical support, supplement to Grant MCS-8002149.
1983–1986	University of Massachusetts, Grant MCS-8219848.
1986–1989	University of Massachusetts, Grant DMS-8521536.
1989–1991	University of Massachusetts, Grant DMS-8901138.
1992–1994	University of Massachusetts, Grant DMS-9123575.
1994–1997	University of Massachusetts, Grant DMS-9322355.
1997–2000	University of Massachusetts, Grant DMS-9700852.
1998	International Travel Supplement to Grant DMS-9700852.
2002–2005	University of Massachusetts, Grant DMS-0202309.
2006–2011	University of Massachusetts, Grant DMS-0604071 (jointly with Bruce Turkington)

DEPARTMENT OF ENERGY GRANT

1999–2002 University of Massachusetts, Grant DE-FG02-99ER25376 (jointly with Bruce Turkington)

OTHER GRANT

1996–1998 United States Civilian Research and Development Foundation for the Independent States of the Former Soviet Union. Award RM1-226, No. 1634, December 1996–December 1998.

HONORS

- (1) Phi Beta Kappa, Harvard University, 1968.
- (2) Summa Cum Laude, Harvard University, 1969 (in Mathematics and German Literature).
- (3) Broadened Faculty Research Grant, University of Massachusetts, Fall Semester 1976.
- (4) Alfred P. Sloan Research Fellow, September 1977–September 1981.
- (5) Lady Davis Fellowship and an appointment as a Visiting Professor in the Department of Mathematics at the Technion–Israel Institute of Technology, Haifa, Israel, January–June 1982.
- (6) Lady Davis Fellowship and an appointment as a Visiting Professor in the Faculty of Industrial Engineering and Management at the Technion–Israel Institute of Technology, Haifa, Israel, April–July 1989.
- (7) Election to fellowship in the Institute of Mathematical Statistics, May 1999. The letter announcing the election said the following: “Fellowship is a way of honoring outstanding research contributions of our members, contributions which help keep IMS in a leading role in the field of statistics and probability.”
- (8) 2001–2002 Outstanding Faculty Award for Research in the College of Natural Sciences and Mathematics, University of Massachusetts Amherst.

VISITING PROFESSORSHIPS

(1) Department of Mathematics, Technion – Israel Institute of Technology, Haifa, Israel, January–June 1982.

(2) Department of Statistics and Department of Mathematics, Hebrew University, Jerusalem, Israel, January–June 1986.

(3) Division of Applied Mathematics, Brown University, Providence, Rhode Island, fall semester 1988 (two days per week).

(4) Department of Industrial Engineering and Management, Technion–Israel Institute of Technology, Haifa, Israel, April–July 1989.

(5) Division of Applied Mathematics, Brown University, Providence, Rhode Island, spring semester 1996 (two days per week).

PH.D. DISSERTATIONS

(1) Michael R. O'Connell, 1980. *GHS Inequality for Large External Field*.

(2) Kongming Wang, 1991. *Limit Theorems and Parameter Estimation for the Q-State Curie-Weiss-Potts Model*.

(3) Gordon Kieffer, 1995. *The Large Deviation Principle for Two-Dimensional Stable Queueing Systems*.

(4) Christopher L. Boucher, 1998. *Large Deviations for Doubly Indexed Stochastic Processes with Applications to Statistical Mechanics*.

(5) Kyle Haven, 2001. *Large Deviation Principles and Complete Equivalence and Nonequivalence Results for Microcanonical and Canonical Ensembles with Applications to Geophysics*.

(6) Hugo Touchette, Department of Physics and School of Computer Science, McGill University, Montréal, Québec, Canada, 2003. *Equivalence and Nonequivalence of the Microcanonical and Canonical Ensembles: A Large Deviations Study*. Although I was not Hugo Touchette's official advisor, I suggested his dissertation problem and worked closely with him during the last year of his dissertation work.

(7) Peter Otto, 2004. *Study of Equilibrium Macrostates for Two Models in Statistical Mechanics*.

(8) Marius Costeniuc, 2005. *Ensemble Equivalence and Phase Transitions for General Models in Statistical Mechanics and for the Curie-Weiss-Potts Model*.

(9) Jingran Li, 2013. *Conditional Gaussian Fluctuations and Refined Asymptotics of the Spin in the Phase-Coexistence Region*.

PARTICIPATION IN A LITERARY CONFERENCE

I delivered a paper entitled “‘A little East of Jordan’: Human-Divine Encounter in Dickinson and the Hebrew Bible” at the 1999 Conference of the Emily Dickinson International Society, August 13, 1999, at Mt. Holyoke College, South Hadley, Massachusetts. The paper was published in *The Emily Dickinson Journal*, Volume 8, Number 1, pages 36–58, 1999. A revised version of the paper was published in a refereed volume of contributions to the 1999 conference: *Emily Dickinson at Home*, pages 123–142. Edited by Gudrun M. Grabher and Martina Antretter. Trier, Germany: Wissenschaftlicher Verlag Trier (2001).

MY BOOK ON BUDDHIST MEDITATION

My book titled *Blinding Pain, Simple Truth: Changing Your Life Through Buddhist Meditation* was published by Rainbow Books in 2011. Material related to the book is available at the book website: <http://RichardSEllis.com>.

MAGAZINE AND NEWSPAPER ARTICLES ABOUT MY WORK

(1) Steven Beeber. “Ellis Blends Creativity, Religion, and Mathematics.” *The Campus Chronicle*, May 16, 1997, page 10.

(2) Jason Eiseman. “Faculty creates Jewish group.” *Massachusetts Daily Collegian*, December 10, 1997.

(3) Patrick Johnson. “Mathematician Drops Dickinson Bombshell: On Studying the Belle of Amherst’s Work, a UMass Professor Found a Hebrew Influence.” *Sunday Republican*, February 7, 1999, page 1.

(4) Donald F. St. Mary. “Professor Richard S. Ellis, Renaissance Man.” *Newsletter, Department of Mathematics and Statistics, University of Massachusetts Amherst, Academic Year 1998–1999*, Volume 14, Fall 1999, pages 3–4.

(5) Terry Y. Allen. “The Poet and the Mathematician” (an article about my research in mathematics and my work on Dickinson and the Hebrew Bible). *Synergy*

(Research and Scholarship at the University of Massachusetts Amherst), Volume 3, Number 1, Fall 1999, pages 12–15.

(6) Marietta Pritchard. “A ‘Rare Intellectual Juggling Act’ Spans Mediums of Vast Extent.” *UMass Magazine*, Volume 4, Number 2, Spring–Summer 2000, pages 30–32.

(7) Phyllis Lehrer. “Expecting the Unexpected: Deviations Common in Life of Math Professor.” *Amherst Bulletin*, February 22, 2002, page 2.

INVITATIONS EXTENDED BUT DECLINED

(1) Conference on Mathematical Stochastics at the Mathematics Research Institute in Oberwolfach, West Germany, March 4–10, 1979.

(2) Third Vilnius Conference on Probability and Mathematical Statistics, Vilnius, U.S.S.R., June 22–27, 1981.

(3) Invited talk (40 minutes) in session on limit theorems in probability at the IMS ENAR Central Regional Meeting in San Antonio, Texas, March 14–17, 1982.

(4) Colloquium and Workshop on Random Fields: Rigorous Results in Statistical Physics in Kőszeg, Hungary, August 26–September 1, 1984.

(5) The Sixth International Symposium on Information Theory in Tashkent, Uzbek, U.S.S.R., September 18–22, 1984.

(6) Conference on Mathematical Stochastics at the Mathematics Research Institute in Oberwolfach, West Germany, March 9–15, 1986.

(7) Fifth International Vilnius Conference on Probability Theory and Mathematical Statistics, Vilnius, U.S.S.R., June 26–July 1, 1989.

(8) 36th Annual Allerton Conference on Communication, Control, and Computing, September 23–25, 1998 at the University of Illinois, Urbana-Champaign.

12/2014