

Name: H. EUGENE STANLEY

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EDUCATION:

- **B.A., Physics**, 1962, Wesleyan Univ., $\phi\beta\kappa$; National Merit Scholarship. Honors Thesis: T.A.Green
- 1 year **Experimental biophysics**, Univ. Köln (Max Delbrück, Advisor). Fulbright Fellowship.
- **Ph.D., Physics**, January 1967, Harvard Univ. (T.A. Kaplan & J.H. Van Vleck). NSF Fellowship.

EMPLOYMENT:

- (1) William Fairfield Warren Distinguished Professor, Boston University, 2011-present.
 - Lorentz Professor, University of Leiden, Spring, 2013
 - University Professor, 1979-2011.
 - Director, Center for Polymer Studies, 1978-present.
 - Professor of Physiology, Boston University School of Medicine, 1978-present.
 - Professor of Physics, Boston University, 1976-present.
 - Professor of Biomedical Engineering, Boston University, 2007-present.
 - Professor of Chemistry, Boston University, 2007-present.
- (2) Herman von Helmholtz Associate Professor, M.I.T., 1973-76.
 - Associate Professor of Physics, M.I.T., 1971-73.
 - Assistant Professor of Physics, M.I.T., 1969-71.
- (3) Miller Fellow, Miller Institute for Basic Research in Science, Physics Department, University of California, Berkeley, 1968-69.
- (4) Staff Member, Solid State Physics Group, M.I.T., Lincoln Laboratory, 1967-69 (Part-time: 1964-67; Consultant: 1969-71).

HONORS, AWARDS, NAMED LECTURES, and LEADERSHIP:

- (1a) Doctorate *Honoris Causa*: Inst. for Advanced Studies, (Lucca, Italy), 2012. <http://pdl.vimeocdn.com/89629/117/1392>
- (1b) Doctorate *Honoris Causa*: University of Messina (Italy), 2009
- (1c) Doctorate *Honoris Causa*: Northwestern Univ. (Evanston, IL), 2009.
- (1d) Doctorate *Honoris Causa*: Univ. Wroclaw (Poland), 2004.
- (1e) Doctorate *Honoris Causa*: University of Liège (Belgium), 2001.
- (1f) Doctorate *Honoris Causa*: Univ. Dortmund (Germany), 2001.
- (1g) Doctorate *Honoris Causa*: Eötvös Loránd University (Budapest, Hungary), 1997.
- (1h) Doctorate *Honoris Causa*: Bar-Ilan University (Ramat-Gan, Israel), 1994.
- (1i) Doctorate *Honoris Causa*: Universidade Federal de Ceará (Fortaleza, Brazil), 2013.
- (2a) Elected *Member*, *National Academy of Sciences*, 2004.
- (2b) Elected *Honorary Professor*, Inst. for Advanced Studies and Complexity Institute, Univ. Pavia, 2004–.
- (2c) Elected *Foreign Member*, *Academia Brasileira de Ciências (Brazilian Academy of Sciences)*, 2002.
- (2d) Elected *Honorary Professor*, *Eötvös Loránd University, Budapest*, 1997.
- (2e) Elected *Honorary Member*, *Hungarian Physical Society*, 1996.
- (2f) Elected *Honorary Professor*, *Shanghai University*, 2011–
- (2g) Elected *Honorary Professor*, *East China University of Science & Technology*, 2011–
- (3) *John Simon Guggenheim Memorial Fellowship*, 1979–1980.
- (4a) *Julius Edgar Lilienfeld Prize*, Am. Phys. Soc., 2008
- (4b) *Boltzmann Medal*, International Union of Pure and Applied Physics (IUPAP), 2004.
- (4c) *Teresiana Medal in Complex Systems Research*, Institute for Advanced Studies, Univ. Pavia, 2004
- (4d) *Nicholson Medal*, American Physical Society, 2003
- (4e) *Distinguished Teacher-Scholar Prize*, 2001. Awarded by the Director of the National Science Foundation.
- (4f) *David Turnbull Prize*, Materials Research Society, 1998.
- (4g) *Floyd K. Richtmyer Prize*, AAPT, 1997.
- (4h) *Massachusetts Professor of the Year*, Council for Advancement & Support of Education (CASE), 1992.

- (5a) *Ramanujan Memorial Lecture, Calcutta, 2012*
- (5b) *John G. Kirkwood Memorial Lecture, Kanpur, 2010.*
- (5c) *Platinum Jubilee Lectures, Indian Academy of Sciences, 2009*
- (5d) *Karlheinz Schmidt Memorial Lecture, Chiemsee, Germany, 2009.*
- (5e) *Sigma Xi National Lecturer, 2002–2003.*
- (5f) *Centennial Lecturer, American Physical Society, 1998–1999.*
- (5g) *Eötvös Lecturer, Budapest, 1997.*
- (5h) *Thirtieth Saha Memorial Lecture, Calcutta, 1992.*
- (5i) *Fourth Bose Memorial Lecture, Calcutta, 1992.*
- (6a) *Zenith Fellow Award of the Alzheimer Association* (shared with D. B. Teplow), 2005.
- (6b) *Memory Ride Prize for Alzheimer research* (shared with B. T. Hyman), 2001.
- (7) *British Petroleum Venture Research Award* (shared with Dr. J. Teixeira), 1989.
- (8) *Choice Award for Outstanding Academic Book of 1971* (awarded by “American Assoc. of Academic Book Publishers” for *Intro. to Phase Transitions & Critical Phenomena*, Oxford Univ. Press).
- (9) *Science Citation Index*: 68,600 ISI Web of Science citations: 60,589 to 1137 articles and 8011 to 8 books—available online at <http://polymer.bu.edu/hes/>.
- (10) “*Hirsch Index*” $H = 119$ (119 papers with citation count larger than rank). (Hirsch [PNAS **102**, 16569 (2005)] names no physicist with $H > 119$).
<http://polymer.bu.edu/hes/articles/highlycited.html>.
- (11a) *Science Citation Index*: (a) 100 most-cited articles of 1980 [Phys. Rev. B **21**, 1223–1245 (1980)]; (b) 100 most-cited articles of 1983 [Phys. Rev. Lett. **50**, 686 (1983)]; (c) 100 most-cited articles of 1985 [Nature **314**, 141–144 (1985)]; (d) 100 most-cited articles of 1988 [Phys. Rev. Lett. **60**, 1330 (1988)].
- (11b) *Science Citation Classic*: “Possibility of a Phase Transition for the Two-Dimensional Heisenberg Ferromagnet” Physical Review Letters **17**, 913–916 (1966). This and the paper “Spherical Model as the Limit of Infinite Spin Dimensionality” Physical Review **176**, 718–721 (1968) were selected to be reproduced in a compendium of the top 1000 papers of the past 100 years: *The Physical Review: The First Hundred Years. A Selection of Seminal Papers and Commentaries* H. H. Stroke, Ed, (AIP Press, NY, 1995).
- (12a) American Association for the Advancement of Science (AAAS). Elected to fellowship, 1994.
- (12b) American Physical Society. Elected to fellowship, 1974. Chair, New England Sec. 1981–1982. Member, *Committee on Education*, 1993–1995; elected to Executive Committee, *Division of Biological Physics*, 1998–2000.
- (13a) Member, National Academy of Sciences Committee *Forefronts of Science at the Interface of Physical and Life Sciences*, operated under the auspices of the NRC Board of Life Sciences and the NRC Board on Physics and Astronomy, 2007–2009.
- (13b) Chair, *National Academy of Sciences/Keck Futures Initiative* on Complexity, 2007–2008
- (13c) Appointed, *Committee of Experts*, NIH Heart, Lung & Blood Inst, 2011–2013
- (13d) Appointed, Advisory Board *International Center for Dynamical Biomarkers & Translational Medicine (CDBTM)*, National Central University, Taiwan, 2012–
- (14a) Member, International Jury (P. G. de Gennes, Chair) to award the 2003, 2005, 2007, 2009, 2011, and 2013 UNESCO–L’OREAL “Women in Physics” Prizes (\$500,000).
- (14b) Member, National Academy of Sciences Jury (R. Ciccione, Chair) to award the 2006, 2007, 2008, 2009, 2010, 2011 and 2012 “Women in Physics” USA Prizes.
- (14c) Member, External Evaluation Committee, New University of Singapore, 2009–present.
- (14d) Member, Visiting Committee, Wesleyan University Physics Dept, 2003.
- (14e) Member (with Chaikin, de Gennes, Dresselhaus, Libchaber, and Pincus), External Evaluation Committee *Centre de Recherche Paul-Pascal* 1999.
- (14f) Appointed by the President of the National Academy of Sciences to the Committee on *The Role of Naval Forces in the Global War on Terror*, 2006–2007.
- (14g) Member, Visiting Committee, Laboratory for Nonlinear Studies, Los Alamos Scientific Laboratory, 2004–2007.
- (14h) Chair, External Evaluation Committee, Academia Sinica, 2003–2005.

- (14i) Member (with Guyon, Cheetham) of External Evaluation committee *Center for Advanced Interdisciplinary Research in Materials Science at the Universidad de Chile in Santiago*, 2000–2005.
- (14j) Member, *National Science Foundation External Evaluation Committee, Materials Research Laboratories*, 1986.
- (14k) Member, Scientific Advisory Board, Josef Stefan Institute, Ljubljana, Slovenia.
- (14l) Member, Board of Directors, Institute of Theoretical Physics, Brasilia, Brazil.
- (14m) Member, Advisory Board, Program for the Management of Complex Realities, University of Pavia.
- (15) JSPS (Japan Society for the Promotion of Science) Professorship at Large, 1975 and 1995.
- (16a) Visiting Professor, Seoul National University, August 1982.
- (16b) Visiting Professor, Peking University, July 1981.
- (16c) Joliot Curie Visiting Professor, Ecole Supérieure de Physique et Chimie (ESPCI), Paris, 1979.
- (17a) Regents Lecture, University of Southern Mississippi, April 1994.
- (17b) Distinguished Lecturer, University of Toronto, Canada, 1977.
- (18) *University Lecturer*, Boston University (awarded for combination of teaching & research), 1991–92.
- (19a) Co-Director, three Enrico Fermi Schools of Physics (Varenna, Italy): 2010, 2003, and 1996.
- (19b) Co-Director, two NATO Adv. Res. Workshops (Budapest, 1999; Volga River, Russia, 2001).
- (19c) Co-Director, three NATO Advanced Study Institutes (Cargèse, France) 1985, 1988, and 1990.
- (19d) Elected Vice-Chair, Gordon Research Conference “*Physics and Chemistry of Water.*”, 1996; Chair, 1998.
- (19e) Chair, *IUPAP Int’l Conf. on Thermodynamics & Statistical Mechanics (STATPHYS-16)*, 1986.
- (20) Member, *National Academy of Sciences Sub-Committee on Non-Linear Science*, 1986–1988.
- (21a) Co-Editor-in-Chief (with Dawson, Indekeu, Parisi, and Tsallis): *Physica A*, 1988–present.
- (21b) Chief Editor, *Graduate Texts in Physics*, Springer-Verlag.
- (21c) Editorial Boards: Co-Editor: *New Journal of Physics* (from journal’s founding until 2005), *Quantitative Finance*, *Granular Matter*, *Fractals*, *International Journal of Molecular Sciences (IJMS)*, *Heterogeneous Chemical Reviews*, *PhysChemComm.*, *International Journal of Theoretical & Applied Finance*, *Fluctuation and Noise Letters: An Interdisciplinary Scientific Journal on Random Processes in Physical, Biological, and Technological Systems*, *COMPLEXUS: Modelling and Understanding Functional Interactions in Life Sciences; Nonlinear Dynamics, Psychology, and Life Sciences*; *International Journal of Portfolio Analysis & Management (IJPAM)*
- (21d) Co-Editor of Springer Verlag book series *Partially Ordered Systems*.
- (21e) Publications committee, *Biophysical Society*, 1999–2002.
- (21f) Member, *Finance and Economics Editorial Boards Network*. An Independent Social Network for Journal Board Members in Finance and Economics.
- (22) “Technology Links Research to Education” (pp. 64–65 of D. Allan Bromley’s *Grand Challenges 1993: High Performance Computing and Communications*, presented to Congress by President Bush as part of his FY 1993 budget request).
- (23) Designed and executed 30-minute segment of *3-2-1 Contact* with Children’s Television Workshop (shown in 28 countries) explaining random forms to children age 8-12; Designed and executed 30-minute segment for *All-India TV* (200 million viewers)
- (24) Member, Faculty Senate Council and University Council, Boston University, 1978, 1987; 1994-1996; Member, Academic Program Advisory Committee, Boston University/Boston University School of Medicine “MMEDIC Program” 1977-79; Member, Honorary Degrees Committee, Boston University, 1981-1991; Member, Committee on University-Wide Research and Libraries, Boston University, 1981-1991; Member, Ten-Year Strategic Planning Committee, Boston University, 2006–2008.
- (25) Steering Committee, Harvard-M.I.T. Interdisciplinary Program in Biomaterials Science (under the auspices the Harvard Medical School-M.I.T. Program in Health Sciences and Technology), 1971-76; Member, Premedical Advisory Council, M.I.T., 1974-76; Chair, Task Force of the M.D. Curriculum Committee to structure a program “Physical Principles of Quantitative Physiology” for first-year M.D. students (Harvard-M.I.T. Program in Health Sciences), 1973.
- (26) Member, *National Academy of Sciences Committee on the 1000-Ship Navy*, 2007–2009.

FURTHER INFORMATION:

Who's Who in America, *Who's Who in the World*, *Who's Who in American Education*, and *Who's Who in Science and Engineering*. Also P. Gwynne "Critical Contributions from an Unusual Physicist" *Physics World* **9**, No. 9, pp. 9–10 (September 1996). Publications in rank order of citation appear at <http://polymer.bu.edu/hes>. All published papers may be downloaded as pdf files from <http://polymer.bu.edu/hes/articles/>

PUBLICATIONS (Double asterisk denotes 20 "representative" publications)

Citation count provided for those papers with greater than 100 citations

BOOKS

- **1. H. E. Stanley, *Introduction to Phase Transitions and Critical Phenomena*, a book in the "International Series of Monographs on Physics" of Oxford University Press, Oxford and New York 1971 (308 pages). **Prize:** "Outstanding Academic Book" Award, 1972. **Second Edition:** Scheduled for completion. **Translations:** *Russian*—Translated by S. V. Vonsovsky (MIR, Moscow, 1973); *Japanese*—Translated by K. Matsuno (Tokyo Tosho, Tokyo, 1974). **Citations:** 5033 (3405 cited correctly, 1434 cited as Eugene Stanley, 1242 with the year of the reprint, 1978, rest cited under different years, different titles, and with various typing mistakes).
2. H. E. Stanley, Ed., *Biomedical Physics and Biomaterials Science* based upon lectures delivered at a special summer program at MIT), M.I.T. Press, Cambridge, 1972. Paper and Hardcover editions, 365 pages.
3. H. E. Stanley, Ed., *Cooperative Phenomena near Phase Transitions*. M.I.T. Press, Cambridge, 1973. Paper and Hardcover editions, 308 pages.
4. H. E. Stanley and N. Ostrowsky, [eds] *On Growth and Form: Fractal and Nonfractal Patterns in Physics* (Proceedings 1985 Cargèse NATO ASI, Series E: Applied Sciences, Vol 100). Martinus Nijhoff Publishers, Dordrecht, 1985. **Citations:** 523
5. H. E. Stanley, Ed. *Statistical Physics* (Proceedings STATPHYS-16, IUPAP International Conf. on Thermodynamics & Statistical Mechanics, Boston University, 11-15 Aug 1986) North-Holland Physics, Amsterdam, 1986.
6. H. E. Stanley and N. Ostrowsky, [eds] *Random Fluctuations and Pattern Growth: Experiments & Theory* (Proceedings 1988 Cargèse NATO ASI Series E: Applied Sciences, Vol 157). Kluwer Academic Publishers, Dordrecht, 1988.
7. D. Stauffer and H. E. Stanley, *From Newton to Mandelbrot: A Primer in Theoretical Physics* (Springer Verlag, Heidelberg & New York, 1990). **Translated into Japanese, Hungarian and Polish.** *Second Edition: 1996.* Reviews: J. Gastineau, *Computers in Physics* **6**, 424-425 (August 1992),
8. H. E. Stanley and N. Ostrowsky, [eds] *Correlations & Connectivity: Geometric Aspects of Physics, Chemistry & Biology* (Proceedings 1990 Cargèse NATO ASI, Series E: Applied Sciences, Vol 188). Kluwer Academic Publishers, Dordrecht, 1990.
9. E. Guyon and H. E. Stanley, *Les Formes Fractales* (Palais de la Découverte, Paris, 1991). **English translation:** *Fractal Forms* (Elsevier North Holland, Amsterdam, 1991). This book *also* serves as the official catalog for an exhibit—of the same title—at the *Palais de la Découverte*, Paris.
10. K. Brecher, S.V.Buldyrev, P. Garik, S. Milosevic, H. E. Stanley, E.F. Taylor, P. A. Trunfio, *Fractals in Science* (Springer Verlag, Berlin and NY, 1994).
11. A.-L. Barabasi and H. E. Stanley, *Fractal Concepts in Surface Growth* (Cambridge University Press, Cambridge, 1995). Adopted by *Library of Science Book Club*. Reviews: G. Dewey, *J. Am. Chem. Soc.* **117**, 12899 (1995); L. M. Sander, *Phys. Today* **46**[10], 68–69 (October 1995); F. Family, *J. Stat. Phys.* **83**, 1255-1259 (1996); A. Hansen, *Fractals* **5**, 325-326 (1997); A. Bunde, *Physik. Blätter*, **5**, 457 (1997). **Citations:** 3081 (2703 cited correctly; rest cited under different years and titles)
12. H. Z. Cummins, D. J. Durian, D. L. Johnson, and H. E. Stanley [eds], *Disordered Materials and Interfaces: Proc. 1995 MRS Fall Meeting Symposium, Vol 407* (Material Research Society, Pittsburgh, 1996).

13. F. Mallamace and H. E. Stanley [eds.], *Physics of Complex Systems: Proc. 1996 Enrico Fermi School on Physics, Course CXXXIV* (Soc. It. Fisica, Bologna, 1997).
14. C. M. Knobler, A. Robledo, and H. E. Stanley [eds], *Statistical Mechanics in the Physical, Biological, and Social Sciences: Festschrift in Honor of Benjamin Widom on the occasion of his 70th Birthday* (Elsevier, Amsterdam, 1997). [Special issue of Physica A, vol. **244**, pp. 1-544.]
15. D. Stauffer, H. E. Stanley, and A. Lesne, *Cour de Physique: De Newton à Mandelbrot* (Springer France, Paris, 1999).
16. A. Gadowski, J. Kertesz, H. E. Stanley, and N. Vanderwalle [eds] *Application of Statistical Physics: Proc. NATO Advanced Research Workshop, Budapest* (Elsevier, Amsterdam, 1999).
17. J. L. Green, C. T. Moynihan, R. J. Speedy, H. E. Stanley, and L. M. Torell [eds], *C. Austen Angell Festschrift* [J. Phys. Chem. B **103**, No. 20, 20 May 1999].
- **18. R. N. Mantegna and H. E. Stanley, *Introduction to Econophysics: Correlations & Complexity in Finance* (Cambridge University Press, Cambridge, 2000). Japanese Translation: Masumi Nakajima (Economistsha, Tokyo 2000); Polish Translation: R. Kutner (2001); Chinese translation: Liang Jing (2001). Indonesian translation: Yohanes Surya (Pearson Education Asia, Prenhallindo, 2002). Russian Translation: Alexandr Ezhov (2007). Reviews: J. Masoliver, J. Stat. Phys. **100**, 801 (2000); B. G. Malkiel, J. Economic Literature **39**, 143 (2001); B. LeBaron, Nature **408**, 290-291 (2001). **Citations:** 1101 (490 cited correctly, without subtitle, 332 with subtitle, 278 with publication year 1999, 812 cited correctly, 278 cited under year 1999, 12 with publication year 2007, 11 cited other ways).
19. H. E. Stanley, M. Aizenman, B. Jancovici, O. Penrose, and J. Percus, [eds] *Statistical Mechanics: From Rigorous Results to Applications: Festschrift in Honor of Joel L. Lebowitz on the occasion of his 70th Birthday* (Elsevier, Amsterdam, 2000). [Special issue of Physica A, vol. **279**, pp. 1-486.]
20. M. Tokuyama and H. E. Stanley [eds], *Statistical Physics—3rd Tohwa University International Conference* (AIP Conference Series, Volume 519, 2000).
21. F. Family, M. Daoud, H. Herrmann and H. E. Stanley [eds] *Scaling and Disordered Systems: Workshop Honoring Antonio Coniglio on his 60th Birthday* (World-Scientific Publishers, Singapore, 2002).
22. V. Brazhkin, S. V. Buldyrev, V. N. Ryzhov, and H. E. Stanley [eds], *New Kinds of Phase Transitions: Transformations in Disordered Substances* Proc. NATO Advanced Research Workshop, Volga River (Kluwer, Dordrecht, 2002).
23. Y. Taniguchi, H. E. Stanley, and H. Ludwig [eds] *Biological Systems under Extreme Conditions: Structure and Function* (Springer-Verlag, Heidelberg, 2002).
24. H. E. Stanley, M. Ausloos, J. Kertesz, R. N. Mantegna, J. A. Scheinkman, and H. Takayasu [eds] *Proceedings of the International Econophysics Conference, Bali* (Elsevier, Amsterdam, 2003)
25. F. Mallamace and H. E. Stanley [eds.], *The Physics of Complex Systems: New Advances and Perspectives* [Proc. 2003 Enrico Fermi School International School of Physics, Course CLV, Course CLV] (Soc. Italiana Fisica, Bologna, 2004).
26. H. E. Stanley, E. Balcells, E. Ruiz-Geli, M. Dominguez, P. Puigdomenech, S. Rovira, O. Pibernat, J. Ros, M. J. Pico, P. Noguera, R. Salecl, H. Lieberman, J. Pigem, L. Fananas, D. Jou, L. Reales, S. Jorda, J. Scott, C. Gelabert, O. Vilarroya, M. Maso, M. Maso, J. Roca, and J. Perello, *Fora d'equilibri: encontre internacional noves fronteres de la ciencia, l'art i el pensament* (Generalitat de Catalunya Departament de Cultura i Mitjans de Comunicacio, 2008).
27. H. E. Stanley, A.-L. Barabási, J. B. Bassingthwaite, B. L. Bassler, D. K. Campbell, S. W. Chisholm, J. S. Langer, S. A. Levin, M. E. Paté-Cornell, M. A. Savageau, D. Valle, and M. Vidal [eds], *Complex Systems: Task Group Summaries* (The National Academies Press, Washington DC, 2008).
28. G. M. Viswanathan, M. G. E. da Luz, E. P. Raposo, and H. E. Stanley, *The Physics of Foraging* (Cambridge University Press, Cambridge, (2011). Reviews: N. Watkins, Physics Today **65**(1), 44 (2012).
29. F. Mallamace and H. E. Stanley [eds.], *Complex Materials in Physics and Biology* [Proc. 2010 Enrico Fermi School International School of Physics, Course CLXXVI] (Soc. Italiana Fisica, Bologna, 2012).
30. S. V. Buldyrev, F. Pammolli, M. Riccaboni, and H. E. Stanley, *The Growth & Instability of Economic Systems* (in completion stage).
31. H. E. Stanley, Editor *Liquid Polymorphism*, volume 152 in the series *Advances in Chemical Physics* (S. A. Rice, Series Editor). Wiley, NY, 2013.

32. I. Florescu, M. C. Mariani, H. E. Stanley, and F. G. Viens [eds.], *Handbook of High-Frequency Trading and Modeling in Finance* (Wiley, New York, 2013).

ENCYCLOPEDIA ARTICLES

26. H. E. Stanley, "Critical Phenomena" in *Encyclopedia of Physics* (Ed. R. M. Besancon). Van Nostrand and Reinhold Publ. Co., N.Y. 1974. p. 180-185.
27. H. E. Stanley, "Critical Phenomena" in *Encyclopedia of Polymer Science and Engineering*, eds Mark, Bikales, Overberger, and Menges (John Wiley and Sons, New York, 1986), Vol. 4.
28. M. Daoud, H. E. Stanley, and D. Stauffer, "Scaling, Exponents, and Fractal Dimensions" in *Polymer Properties Handbook*, edited by J. E. Mark (AIP Press, Woodbury NY, 1995). pp. 71-80.
29. A. Bunde, S. Havlin, J. Klafter, and H. E. Stanley, "Diffusion" in *Macmillan Encyclopedia of Physics* (Macmillan, NY, 1996).

JOURNAL ARTICLES

I. UNDERGRADUATE THESIS RESEARCH

30. T.A. Green, H. E. Stanley, and Y.C. Chiang, "Electron Capture by Protons Passing Through Helium Gas" *Helvetica Physica Acta* **38**, 109-124 (1965).

II. MAGNETIC ORDERING

31. T.A. Kaplan, H. E. Stanley, K. Dwight and N. Menyuk, "Determination of Magnetic Ordering in Heisenberg Magnets from High-Temperature Expansions" *Journal of Applied Physics* **36**, 1129-1130 (1965).
Book Chapters
32. H. E. Stanley, "Critical Phenomena in Heisenberg Models of Magnetism" Chapter 14 of *Solid State Physics, Nuclear Physics and Particle Physics*. I. Saavedra, Ed. (W.A. Benjamin, Inc., New York, 1968), pp. 831-844.
33. H. E. Stanley, G. Paul, S. Milošević, "Dynamic Critical Phenomena in Fluid Systems" in *The Liquid State*, Vol 8B of a 10-volume *Treatise on Physical Chemistry*. (H. Eyring, D. Henderson, and W. Jost, [eds]) Academic Press, N.Y., 1971, pp. 795-878.
34. H. E. Stanley, T. S. Chang, F. Harbus, and L.L. Liu, "Five Introductory Lectures on Critical Phenomena in Simple and Complex Systems: The Unifying Hypotheses of Scaling and Universality" In *Proceedings 1973 Enrico Fermi Varenna School: Course 59 - Local Properties at Phase Transitions*, edited by K. A. Müller and A. Rigamonti (North-Holland, Amsterdam, 1976), pp. 45-136.

III. UTILITY OF CLASSICAL HEISENBERG MODEL FOR CRITICAL PHENOMENA

35. H. E. Stanley and T.A. Kaplan, "On High-Temperature Expansions—The Classical Heisenberg Model" *Physical Review Letters* **16**, 981-983 (1966).
36. H. E. Stanley, "High-Temperature Expansions for the Classical Heisenberg Model. I. Spin Correlation Function" *Physical Review* **158**, 537-545 (1967).
37. H. E. Stanley, "High-Temperature Expansions for the Classical Heisenberg Model. II. Zero-Field Susceptibility" *Physical Review* **158**, 546-551 (1967).

IV. SMOOTHING BEHAVIOR OF SERIES BY EXPANDING IN DIFFERENT VARIABLES

38. H. E. Stanley, "New Expansion for Classical Heisenberg Model and Similarity to $S = 1/2$ Ising Model" *Physical Review* **164**, 709-711 (1967).
39. M.H. Lee and H. E. Stanley, "The Spin - $1/2$ Heisenberg Ferromagnet on Cubic Lattices: Analysis of Critical Properties by a Transformation Method" *Physical Review B* **4**, 1613-1630 (1971).

V. MATERIALS WITH RESTRICTED DIMENSIONALITY

Proposal of a possible phase transition for the 2-dimensional Heisenberg model:

- **40. H. E. Stanley and T. A. Kaplan, "Possibility of a Phase Transition for the Two-Dimensional Heisenberg Ferromagnet" *Physical Review Letters* **17**, 913-916 (1966). "**Science Citation Classic**". **Reproduced in:** *The Physical Review: The first Hundred Years. A Selection of Seminal Papers and Commentaries* H. H. Stroke, Ed, (AIP Press, NY, 1995) [this is a compendium of the top 1000 papers of the past 100 years]. **Citations:** 365
41. H. E. Stanley and T.A. Kaplan, "On the Possible Phase Transition in Two-Dimensional Heisenberg Models" *Journal of Applied Physics* **38**, 975-976 (1967).

Proposal of a possible phase transition for the two-dimensional XY Model.

42. H. E. Stanley, “Critical Properties of Isotropically-Interacting Classical Spins Constrained to a Plane” *Physical Review Letters* **20**, 150-153 (1968).
Quasi-One Dimensional and Quasi-Two Dimensional Materials.
43. L. L. Liu and H. E. Stanley, “Some Results Concerning the Crossover Behaviour of Quasi-2-dimensional and Quasi-One-dimensional Systems” *Physical Review Letters* **29**, 927- 931 (1972).
44. L. L. Liu and H. E. Stanley, “Quasi-one Dimensional and Quasi-two-Dimensional Magnetic Systems: Determination of Crossover Temperature and Scaling with Anisotropy Parameters” *Physical Review B* **8**, 2279-2298 (1973).
45. L. L. Liu and H. E. Stanley, “Some Rigorous Results Concerning Crossover Behavior of Ising-Model with Lattice Anisotropy,” *Phys. Lett. A* **40**, 272 (1972).
46. L.J. deJongh and H. E. Stanley, “Lattice-Dimensionality Crossover Effect in Quasi-d-Dimensional Magnetic Materials” *Physical Review Letters* **36**, 817-820 (20 April 1976).
47. D.N. Lambeth and H. E. Stanley, “Models for Quasi-Two-Dimensional Helium and Magnets” *Physical Review B* **12**, 5302-5314 (1 December 1975).

IV. THE n-VECTOR MODEL

Initial Proposal:

- **48. H. E. Stanley, “Dependence of Critical Properties upon Dimensionality of Spins” *Physical Review Letters* **20**, 589-592 (1968). **Citations:** 163

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- **49. H. E. Stanley, “Spherical Model as the Limit of Infinite Spin Dimensionality” *Physical Review* **176**, 718–721 (1968). **Reproduced in:** (a) *The Physical Review: The first Hundred Years. A Selection of Seminal Papers and Commentaries* H. H. Stroke, Ed, (AIP Press, NY, 1995) [this is a compendium of the top 1000 papers of the past 100 years]; (b) Chapter 1 of Brézin/Wadia [eds] *The Large-N expansion in Quantum Field Theory and Statistical Physics* (World Scientific, Singapore, 1993). Also described extensively in the text Pathria RK *Statistical Mechanics: Second Edition* (Pergamon Press, Oxford, 1996). **Citations:** 421
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XVII. NATURE “NEWS & VIEWS”

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XVIII. SELECTED BOOK REVIEWS

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112 Ph.D. THESES SUPERVISED, 1969-PRESENT

- (1) Gerald Paul, Physics Department, M.I.T., September 1971. “Part I. Critical Phenomena in Magnetic Systems, Part II. Transport Phenomena in Quantum Systems.” *Presently*: Vice President for Research, Data General Corporation
- (2) Sava Milos Milošević, Physics Department, M.I.T., September 1971. “Equations of State Near the Critical Point and Other Aspects of the Cooperative Phenomena in Ferromagnetic Model Systems.” *Presently*: Dean of Science, Univ. of Belgrade.
- (3) Koichiro Matsuno, Physics Department, M.I.T., July 1971. “A Dynamic Cluster Approximation for Second Order Phase Transitions.” *Presently*: Department of Mechanical Systems, Technical University of Nagaoka, Nagaoka 949-54, JAPAN.
- (4) Judith Herzfeld, Chemistry Department, M.I.T., January 1972. “A General Model of Cooperativity and its Application to the Oxygen Equilibrium of Hemoglobin.” *Presently*: Professor, and Chair, Dept of Chemistry, Brandeis University.
- (5) Alexander Maurice Alers Hankey, Physics Department, M.I.T., September 1972. “Generalized Homogeneous Function Approach to Scaling, Universality and Tricritical Points.” *Presently*: Professor of Physics, Maharishi International University

- (6) Richard A. C. Krasnow, Physics Department, M.I.T., January 1973. "The Analytic Structure of Thermodynamic Functions near the Critical Point of Phase Transition." *Presently*: Biophysical Laboratory, Harvard Medical School.
- (7) David Noel Lambeth, Physics Department, M.I.T., May 1973. "Properties of Realistic Models of Magnetic Materials in the Vicinity of their Critical Points." *Presently*: Endowed Chair Professor of Electrical Engineering, Carnegie-Mellon University, Pittsburgh, Pennsylvania.
- (8) Fredric Ira Harbus, Physics Department, M.I.T., August 1973. "Aspects of Critical and Tricritical Phenomena in Magnetic Systems." *Presently*: Bell Telephone Laboratories, Murray Hill, New Jersey.
- (9) Douglas Karo, Physics Department, M.I.T., August 1973. "Calculations of the Critical Region Equations of State for Realistic Models of Ferromagnetic Materials." *Present address*: AVCO Research Laboratories, Everett, Massachusetts.
- (10) Chiu Shuen Hui, Physics Department, M.I.T., October 1973 (with M. H. Lee). "Cooperative Mechanisms of Ion Permeation through Membranes." *Present address*: Prof. of Biophysics, Purdue University
- (11) Kenneth J. Rothschild, Physics Department, M.I.T., November 1973. "Control of Permeation in Biological Membranes." *Presently*: Assoc. Prof. Physiology, Boston Univ. Med. School and Prof. Physics, Boston Univ.
- (12) Luke Lokia Liu, Physics Department, Johns Hopkins University (with R. I. Joseph). "Some Aspects of Phase Transitions and Critical Phenomena in Magnetic Systems." *Presently*: Physics Research Division, Shell Development Co.
- (13) Rama Daga Bansil, Physics Department, University of Rochester, January 1975. "A General Model of Kinetics of Cooperative Ligand Binding in Proteins and Its Application to Hemoglobin Kinetics." *Presently*: Asst. Prof. Physiology, Boston Univ. Med. School, and Prof. Physics, Boston Univ.
- (14) Samuel A. Ellias, Applied Mathematics Department, M.I.T., January 1975 (with S. Grossberg). "Models of Short-Term Memory and Contrast Enhancement in Neural Networks and Active Transport in Biological Membranes." *Presently*: Massachusetts General Hospital, Boston, MA.
- (15) Jeffrey F. Nicoll, Physics Department, M.I.T., March 1975. "Extensions of the Scaling Hypothesis in n-component Systems." *Presently*: University of Maryland.
- (16) George F. Tuthill, Physics Department, M.I.T., June 1975. "Renormalization Group Approaches to Higher Order Critical Points." *Presently*: Professor of Physics, Montana State University.
- (17) Sidney Redner, Physics Department, M.I.T., June 1977. "Helical Order and Its Onset at Lifshitz Points." *Presently*: Professor of Physics, Boston University.
- (18) Peter J. Reynolds, Physics Department, M.I.T., August 1978. "Dilute Magnets near the Percolation Threshold and Related Percolation Phenomena." *Present address*: Physics Division, Army Research Office.
- (19) Hisao Nakanishi, Physics Department, Harvard University, June 1980. "Scaling and Universality Classes of Percolation Phenomena." *Present address*: Prof. of Physics, Purdue Univ.
- (20) Agustin Gonzalez, Physics Department, Boston University, June 1981. "Some Topics in Percolation and Gelation Processes." *Presently*: Physics Department, University of Mexico, Mexico City.
- (21) Alla Margolina, Physics Department, Boston University, June 1983. "Monte Carlo and Series Study of Corrections-to-Scaling in Percolation." *Presently*: Asst. Prof. of Physics, Polytechnic Institute of Brooklyn.
- (22) Edward T. Gawlinski, Physics Department, Boston Univ., June 1983 (with S. Redner). *Present address*: Assoc. Professor, Temple University, Philadelphia.
- (23) Imtiaz Majid, Physics Department, Boston University. June 1984. "Conformational properties of polymers and gels." *Presently*: Department of Materials Science, MIT
- (24) Zorica Djordjevic, Physics Department, Boston University. August 1984. "Statistical mechanics for linear polymers, branched polymers and gels." *Presently*: Physics Department, Univ. of Belgrade.
- (25) Daniel Hong, Physics Department, Boston University, May 1985. *Deceased*: Chairman of Physics, Lehigh University, Bethlehem, PA.
- (26) Cettina Amitrano, Physics Department, University of Naples, December 1988 [with A. Coniglio]. *Presently*: Department of Physics, University of Chicago.
- (27) Pierre Devillard, Physics Department, Boston University, May 1989. *Presently*: Physics Department, University of Munich, Munich, W. Germany

- (28) Robin L. Blumberg Selinger, Physics Department, Harvard University, August 1989. *Presently*: Prof. Physics, Kent State University.
- (29) Dimitris Stassinopoulos, Physics Department, Boston University, June 1990. *Presently*: Department of Theoretical Physics, Brookhaven National Labs
- (30) Jysoo Lee, Physics Department, Boston University, August 1991. *Presently*: Asst. Prof., Seoul National Univ.
- (31) Frank Caserta, Physics Department, Boston University, Dec. 1991. *Presently*: Postdoctoral Fellow, Physiology Dept., Boston Univ. School of Medicine.
- (32) Peter H. Poole, Physics Department, Boston University, November 1992. “Phase Behavior of Metastable Water from Computer Simulation” *Presently*: Canada Research Chair in Modelling and Computer Simulation Department of Physics, St. Francis Xavier University
- (33) Mariela Araujo, Physics Department, Boston University, December 1992. “Anomalous Diffusion and Kinetics Properties of some Generalized Diffusion-Reaction Systems” *Presently*: Imperial College, Univ. London.
- (34) Greg Huber, Physics Department, Boston University, December 1992. “The Onset of Vortex Turbulence”. *Presently*: Professor, University of Connecticut Medical School.
- (35) Sharon C. Glotzer, Physics Department, Boston University, January 1993. “Kinetics of Microphase Separation in Polymer Systems: Theory and Computer Simulation”. *Presently*: Professor of Chemical Engineering, Professor of Materials Science, Professor of Physics, and Endowed Chair Professor, University of Michigan; formerly: Deputy Director, Center for Computational Materials Science, NIST. Winner: 2000 Maria Goeppert Mayer Prize of the American Physical Society; DoD Research Award, \$5,000,000 (analog of the NIH Pioneer Award). Elected 2011: American Academy of Arts and Sciences
- (36) Chung-Kang Peng, Physics Department, Boston University, March 1993. “Long-Range Correlations in Physical and Biological Systems”. *Presently*: Associate Professor of Medicine, Harvard Medical School, and Director, International Center for Dynamical Biomarkers and Translational Medicine at the National Central University, Taiwan
- (37) Hernan Larralde, Physics Department, Boston University, May 1993. “Properties of systems with many random walkers”. *Presently*: Professor of Physics, UNAM (Universidad Nacional Autonoma de Mexico) Cuernavaca
- (38) Srikanth Sastry, Physics Department, Boston University, May 1993. “Phase Behavior and Collective Dynamics of Liquid Water”. *Presently*: Professor of Physics, JNCASR (J. Nehru Center for Advanced Scientific Research) and Bangalore Institute of Science. Awarded the highly prestigious 2008 Bhatnagar Prize (for best Indian scientist under age 45) by Prime Minister Singh.
- (39) Sona Prakash, Physics Department, Boston University, August 1993. “The Percolation Transition in Correlated and Frustrated Systems”. *Presently*: University of Amsterdam.
- (40) Stefan Schwarzer, Physics Department, Boston University, October 1993. “Geometry and Dynamics of Diffusion-Limited Growth” *Presently*: Asst. Professor of Physics, Univ. Stuttgart.
- (41) Albert-László Barabási, Physics Department, Boston University, May 1994. “Scaling Theory of Interfaces” *Presently*: Endowed Chair (Professor of Physics), Northeastern University. Recipient: \$100,000 NEC Prize, 2008.
- (42) Luis A. N. Amaral, Physics Department, Boston University, June 1995. “Scaling Properties of Driven Interfaces in Disordered Media” *Presently*: Professor of Chemical and Biological Engineering Associate Professor of Medicine Graduate Program Director, Dept. Chem. and Biol. Eng., Northwestern University. Elected *Early Career Scientist of the Howard Hughes Medical Institute (HHMI)*.
- (43) Veronica Johow, Polymer Center and University Professors Program, Boston University, December 1995. “Interactive Science Communications: Producing ‘The Dance of Chance’ Multimedia Exhibit for the Boston Museum of Science” *Presently*: President, *Science Communications*, via Disciplina 4, 20123 Milano (7202-1539).
- (44) Hernan A. Makse, Physics Department, Boston University, May 1997. “Statistical Patterns in Nature: Growing Order Out of Randomness.” *Presently*: Professor of Physics, City University of New York.
- (45) Gandhi Viswanathan, Physics Department, Boston University, May 1997. “Analysis of Anomalous Fluctuations in the Dynamics of Complex Biophysical Systems” *Presently*: Professor of Physics, Univ. of Natal, Brazil

- (46) Steven T. Harrington, Physics Department, Boston University, May 1997 “Critical and Glassy Behavior in Models of Supercooled Water”. Presently: The Genetics Institute
- (47) Stefano Zapperi, Physics Department, Boston University, January 1998 “Avalanches in Disordered Systems”. Presently: Assoc. Prof. equivalent (tenure), Univ Milano.
- (48) Reza Sadr, Physics Department, Boston University, Dec. 1998. “Modeling Size Disperse Solids and Anomalous Liquids”. Present address: EMC Corporation.
- (49) Plamen Ivanov, Biophysics Department, Boston University, Dec 1998. Present address: Department of Medicine, Harvard Medical School and Department of Physics, Boston University
- (50) Francis W. Starr, Physics Department, Boston University, May 1999. “Continuity of Liquid and Glassy Water” Present address: Associate Professor of Physics (with tenure), Wesleyan University.
- (51) Nikolay V. Dokholyan, Physics Department, Boston University, May 1999 “Applications of Statistical Mechanics to Biological Macromolecules”. Present address: Prof., and Director, Center for Computational and Systems Biology, Department of Biochemistry and Biophysics, University of North Carolina at Chapel Hill
- (52) Yanhui Liu, Physics Department, Boston University, Jan 1999. “Abnormal Fluctuations in Physiological and Economic Systems”. Present address: Emergent Corporation/Keane.
- (53) Ivo Grosse, Physics Department, Boston University, January 2000, “Applications of Statistical Physics and Information Theory to the Analysis of DNA Sequences” Present address: Postdoctoral fellow, Berlin University.
- (54) Vivienne Plerou, Physics Department, Boston College (official advisor: K. Bedell, Chair of Physics, Boston College)(March 2001). Present address: Boston University. Winner: 2003 International Young-Scientist Award for Socio- and Econophysics, 5000 Euros, sponsored by the European Union.
- (55) Parameswaran Gopikrishnan, Physics Department, Boston University (April 2001). “Quantifying Economic Fluctuations Using Statistical Physics”. Present address: Goldman Sachs, New York.
- (56) Antonio Scala, Physics Department, Boston University (May 2001), “Water-like Anomalies in Classical Fluids” Present address: Assistant Professor, Univ. Rome.
- (57) Emilia La Nave, Physics Department, Boston University (Jan. 2002), “Supercooled Liquid Dynamics in Configuratin Space” Present Address: Assistant Professor, Univ. Rome.
- (58) Masako Yamada, Physics Department, Boston University (Sep 2002), ”Crystallization, Liquid-Liquid Phase Transition and Relaxation in Supercooled Water” Present Address: Group Leader, General Electric Research Laboratories, Schnectady, NY
- (59) Anna Skibinsky, Chemistry Department, Boston University (Jan 2003), “Modeling Liquid-Liquid Phase Transitions and Quasicrystal Formation”. Present Address: NIH/FDA, Bethesda, MD
- (60) Feng Ding, Physics Department, Boston University (2003), Present Address: University of North Carolina
- (61) Chung Lo, Physics Department, Boston University (2003), “Statistical Physics Approaches to Quantifying Sleep-Stage Transitions” Present Address: Yale University
- (62) Nicolas Giovambattista, Physics Department, Boston University (2004), “Physics of Supercooled Water and Amorphous Ices”. Present Address: Asst. Professor of Physics, CUNY Brooklyn.
- (63) Jose Borreguerro, Physics Department, Boston University, (November 2004). “Computational Studies of Protein Stability and Folding Kinetics” Present Address: Georgia Tech and Oak Ridge National Laboratory
- (64) Kun Hu, Physics Department, Boston University, (December 2004). “Statistical Physics Approaches to Understanding Physiological Fluctuations”. Present Address: Harvard Medical School.
- (65) Eduardo Lopez, Physics Department, Boston University (April 2005). “Physics of Flow in Random Media” Present Address: Oxford University
- (66) Zhi Chen, Physics Department, Boston University (May 2005), “Stgatistical Physics Approaches to Understanding Physiological Signals” Present address: University of California, Irvine
- (67) Kaushik Matia, Physics Department, Boston University (June 2005) “Application of Statistical Physics Approaches to Complex Organizations” Present address: Barclay’s Research Division, NY
- (68) Shouyong Peng, Physics Department, Boston University, (August 2005). “Statistical Physics Approaches to Alzheimer Disease” Present Address: Harvard Medical School

- (69) Sameet Sreenivasan, Physics Department, Boston University (August 2006). “Application of Statistical Physics to Random Graph Models of Networks”. Present address: Rensselaer Polytechnic Institute (RPI).
- (70) Sijung Yun, Physics Department, Boston University, (December 2006). “Statistical Physics of Folding and Aggregation of Amyloid beta-protein of Alzheimer’s Disease”. Present address: NIH
- (71) Dongfeng Fu, Physics Department, Boston University, August 2007. “Statistical Physics Approaches to Understanding the Firm Growth Problem” Present address: D. E. Shaw Co.
- (72) Pradeep Kumar, Physics Department, Boston University, September 2007. “Anomalies of Bulk, Nanoconfined and Protein-Hydration Water” Present address: Rockefeller University
- (73) Limei Xu, Physics Department, Boston University, September 2007. “Liquid-Liquid Phase Transition in a Two-Scale Model of Anomalous Liquids”. Present address: Associate Professor, Peking University.
- (74) Zhenhua Wu, Physics Department, Boston University, September 2007. “Physics of flow in weighted networks”. Present address: Harvard University
- (75) Alfonso Lam, Physics Department, Boston University, May 2008. Present address: University of California, Irvine, CA.
- (76) Zhenyu Yan, Physics Department, Boston University, “Anomalies of Water and Simple Liquids”. November 2008. Present Address: Harvard Medical School
- (77) Yiping Chen, Physics Department, Boston University, “Study of Complex Networks Using Statistical Physics Methods” December 2008.
- (78) Fengzhong Wang, Physics Department, Boston University, “Statistical Physics Approaches to Financial Fluctuations”. May 2009. Present address: Senior Data Scientist at Litle Co
- (79) Marco G. Mazza, Physics Department, Boston University, “Thermodynamics and Dynamics of Supercooled Water”. May 2009. Present address: Univ. of Berlin.
- (80) Maksim Kitsak, Physics Department, Boston University, “Organization of Complex Networks”. May 2009. Present address: CAIDA group, University of California, San Diego.
- (81) Arnab Majumdar, Physics Department, Boston University, “Transport in Asymmetrically Branched Structures: A statistical Mechanical Approach to Structure-Function Relations in the Lung” May 2009. Present address: Boston University
- (82) Irena Vodenska, Physics Department, Boston University, “Interdisciplinary approaches to understanding and forecasting volatility.” August 2009. Present address: Asst. Professor, Boston University
- (83) Andrew Inglis, Physics Department, Boston University. “Measuring Neuron/Glial Cellular Arrangement in the Mammalian Cortex”. December 2009. Present address: Research Associate, Boston University.
- (84) Sungho Han, Physics Department, Boston University, “Water Confined in Hydrophobic Environments”, June 2010. Present address: Physics Department, Univ Calif Irvine. Dissertation Committee: H. Eugene Stanley, Skocpol, Ludwig, Carey, Feng
- (85) Jia Shao, Physics Department, Boston University, June 2010. “Statistical Physics and Opinion Formation”. Present Address: Bloomberg, NYC.
- (86) Alexander M. Petersen, Physics Department, Boston University, 8 March 2011. “Applications of Statistical Physics to the Social and Economic Sciences”. Present Address: Institute for Advanced Studies, IMT Lucca.
- (87) Tobias Kesselring (jointly with H.J. Herrmann), ETH Zurich, January 2012
- (88) Elena Strelakova, Physics Department, Boston University, April 2012 (with G. Franzese). “Effects of Confinement on the Thermodynamics of Supercooled Water.”. Present address: MIT Postdoctoral Research Associate.
- (89) Mark Dickison, Physics Department, Boston University, April 2012. “Dynamic and Interacting Complex Networks.” Present Address: DTRA, Arlington, VA
- (90) Joel Tenenbaum, Physics Department, Boston University, April 2012. “Applications of Statistical Physics to Complex Systems: Seismic Physics, Econophysics, and Sociophysics” Present Address: Asst. Professor, Boston University School of Management
- (91) Jianxi Gao, Boston University & Shanghai University April 2012 (jointly with S. Havlin) Present Address: Barabasi postdoc, Northeastern Univ, Boston, MA
- (92) Kevin Stokely, Physics Department, Boston University, “Thermodynamics and Dynamics of Supercooled Water” Aug 2012. (with G. Franzese) Present Address: Columbia University Chemistry Dept (Laura Kaufman)

- (93) Guanliang Li, Physics Department, Boston University “Transport and Percolation in Complex Networks” Sep 2012 Present Address: Pharos Science and Applications
- (94) Jiayuan Luo, Physics Department, Boston University, December 2012 Present Address: Software Engineering Dept, TripAdvisor Inc.
- (95) Xuqing Huang, Physics Department, Boston University, May 2013 “Network Theory and its Application in Economic Systems” Present Address: Bloomberg, NYC.
- (96) Wei Li, Physics Department, Boston University, August 2013 “Statistical Physics Approaches to Complex Systems” Present Address: State Street Bank, Boston
- (97) Feng Ling, Physics Department, National University of Singapore (jointly with Baowen Li)
- (98) Erik Lascaris, Physics Department, Boston University (expected).
- (99) Qian Li, Physics Department, Boston University (expected).
- (100) Will Morrison, Physics Department, Boston University (expected).
- (101) Joao Ricardo Santos, Physics Department, Boston University (expected).
- (102) Di Zhou, Physics Department, Boston University (expected).
- (103) Duan Wang, Physics Department, Boston University (expected).
- (104) Adam Avakian, Physics Department, Boston University (expected).
- (105) Zhiqiang Su, Physics Department, Boston University (expected).
- (106) Shuai Shao, Physics Department, Boston University (expected).
- (107) Chester Curme, Physics Department, Boston University (expected).
- (108) Antonio Majdandzić, Physics Department, Boston University (expected).
- (109) Nima Dehmamy, Physics Department, Boston University (expected).
- (110) Alexander Becker, Physics Department, Boston University (expected).
- (111) Nagendra Panduranga, Physics Department, Boston University (expected).
- (112) Xin Yuan yuanx168@bu.edu

145 “RESEARCH ASSOCIATES” and “VISITING SCIENTISTS”

- (1) M. Howard Lee. **Presently:** Professor of Physics, Univ. of Georgia.
- (2) Ruth Ditzian (now Ruth Ditzian-Kadanoff). **Presently:** Assistant Professor of Medicine, U. Chicago
- (3) Chikao Kawabata. **Presently:** Professor of Physics, Okayama Univ.
- (4) Thomas C. Chang. **Presently:** Senior Research Scientist, M.I.T.
- (5) George D.J. Phillis. **Presently:** Professor of Physics, Worcester Polytechnic Institute.
- (6) Irwin M. Asher **Presently:** Section Head, U.S.Food and Drug Administration, Bethesda, MD.
- (7) Jos Rogiers **Presently:** Physics Department, Univ. of Leeuwen, Belgium.
- (7a) Vitold E. Yurkevich **Deceased:** Physics Department, Univ. of Rostov on Don, Russia
- (8) William Klein. **Presently:** Professor of Physics, Boston University.
- (9) Antonio Coniglio. **Presently:** Endowed Chair of Physics, Univ. Napoli.
- (10) Alan Brown. **Presently:** National Bureau of Standards (NIST).
- (11) Shunichi Muto. **Presently:** Assoc.Prof.Physics, Hokkaido Univ.
- (12) Izumi Nishio. **Presently:** Chair, Physics Dept, Aoyama Gakuin University, Tokyo.
- (13) Dietrich Stauffer. **Presently:** Professor of Theoretical Physics, Cologne University, Germany
- (14) Walter Selke. **Presently:** Prof. Physics, Univ. Aachen, Germany
- (15) Don Shalatin. **Presently:** Hebrew University, Jerusalem.
- (16) Naeem Jan. **Presently:** St. Francis Xavier University, Antigonish, Nova Scotia.
- (17) Ikuo Ono. **Presently:** Professor of Physics, Tokyo Institute of Technology, Japan.
- (18) Zhan-ru Yang. **Presently:** Prof. Physics, Beijing University, Beijing, China.
- (19) Alfons Geiger. **Presently:** Professor of Physical Chemistry, Universität Dortmund.
- (20) Fereydoon Family. **Presently:** Professor of Physics (Endowed Chair), Emory Univ., Atlanta, GA
- (21) Mohamed Daoud. **Presently:** Director of Research, CEN Saclay, France.
- (22) Peter Mausbach. **Presently:** Professor of Chemistry, Cologne Techn. Hochschule
- (23) Zeev Alexandrowicz. **Presently:** Professor of Polymer Physics, Weizmann Inst., Rehovoth, Israel.
- (24) Constantino Tsallis. **Presently:** Director, Theoretical Physics, CBPF, Rio de Janeiro, Brazil
- (25) Ivan P. Fittipaldi. **Presently:** Chair, Physics Dept., Universidade Federal de Pernambuco, Recife

- (26) Roberto Jorge Vasconcelos dos Santos rjvs@fundepes.brj. **Presently:** President of the University Foundation, responsible for the management of all the research fundings of UFAL. Also: Univ. Federal de Alagoas, Macioó, Brazil
- (27) Daniel Ben-Avraham. **Presently:** Assoc. Professor of Physics, Clarkson Inst. of Tech., Potsdam
- (28) Francois Leyvraz. **Presently:** Prof. Physics, Univ. of Mexico. (Winner: Moshinsky Award).
- (29) Armin Bunde. **Presently:** Professor of Physics, University of Giessen, Germany.
- (30) F.Y. Wu. **Presently:** Professor of Physics, Northeastern University, Boston, MA
- (30a) Takashi Nagatani. **Presently:** Professor of Physics, Shizuoka University, Hamamatsu, JAPAN
- (31) John L. Cardy. **Presently:** Professor of Physics, Oxford University, Oxford, England.
- (32) Peter Mausbach. **Presently:** University of Dortmund, Germany
- (33) Robin Speedy. **Presently:** Professor of Chemistry, Victoria University, Victoria, New Zealand
- (34) Viktor Chukanov. **Presently:** Moscow State University, Moscow.
- (35) Sasuke Miyazima. **Presently:** Chair of Physics, Chubu University, Nagoya, Japan.
- (36) Michael J. Stephen. **Deceased:** Professor of Physics, Rutgers University, New Brunswick, NJ.
- (37) Johann Nittmann. **Presently:** Dir., Campus-Based Research Center, Digital Equip. Corp., Wien
- (38) Eyal Arian. **Presently:** NASA Langley Research Center, Cleveland, Ohio
- (39) Preben Alstrøm. **Presently:** Professor of Physics, Niels Bohr Institute, Univ. Copenhagen.
- (40) Francesco Sciortino. **Presently:** Professor of Physics, Univ. of Rome.
- (41) Ulrich Essmann. **Presently:** Univ. North Carolina
- (42) Linda S. Shore. **Presently:** Professor, San Francisco State University
- (43) Borko Stošić. **Presently:** Professor, Univ. Pernambuco, Recife, Brazil
- (44) Pablo Jensen **Presently:** CNRS, Univ. Lyon, France.
- (45) Peter Ossadnik. **Presently:** Thinking Machines, Incorporated.
- (46) Mark F. Gyure. **Presently:** Research Staff, Hughes Research Institute, Malibu, CA
- (47) Martina Ossadnik. **Presently:** Research Staff, KFA Julich, Germany
- (48) Rosario Mantegna. **Presently:** Professor of Physics, Univ. Palermo.
- (49) Philip Maass. **Presently:** Prof. of Physics, Univ. Ilmenau,
- (50) Peter Garik, **Presently:** Assoc. Prof. of Education, Boston Univ.
- (51) Michael Rosenblum.. **Presently:** Prof. of Physics, Univ. Potsdam.
- (52) Kent Lauritsen. **Presently:** Univ. Copenhagen.
- (53) Rodolfo Cuerno **Presently:** Univ. Madrid.
- (54) Martin Meyer **Presently:** Science et Finance, Paris.
- (55) Heiko Leschhorn. **Presently:** Univ. Dusseldorf.
- (56) Luciano Da Silva. **Presently:** Prof. of Physics, Univ. Natal, Brazil.
- (57) Hiroko Kitaoka. **Presently:** Tokyo University.
- (58) Enrique Cabarcos. **Presently:** Univ. Madrid.
- (59) Pierre Cizeau. **Presently:** Univ. Pierre et Marie Curie. Paris
- (60) Murat Canpolat **Presently:** Associate Prof. at Akdeniz University, Turkey
- (61) Carlos Argolo **Presently:** Professor of Physics, University of Natal
- (62) Jose Cressoni **Presently:** Professor of Physics, University of Alagoas
- (63) Jan Karbowski **Presently:** Department of Mathematics, Boston University
- (64) Harald Kallabis **Presently:** Research Division, Bayer Corporation, Leverkusen, Germany
- (65) J. K. Nielsen **Presently:** University of Copenhagen
- (66) Luis Amaral *Presently:* Professor of Chemical and Biological Engineering Associate Professor of Medicine Graduate Program Director, Dept. Chem. and Biol. Eng., Northwestern University. Elected *Early Career Scientist of the Howard Hughes Medical Institute (HHMI)*.
- (67) Paul Trunfio
- (67a) Arie Ben-Naim **Presently:** Hebrew University, Jerusalem, Israel
- (68) Thadeu Penna **Presently:** University of Niteroi, Niteroi, Brazil
- (69) Brigita Kutnjak-Urbanc **Presently:** Assoc. Professor of Physics, Drexel University
- (70) Youngki Lee **Presently:** Univ. Hunan, Hunan, China
- (71) Marc Barthelemy **Presently:** CEA Saclay, Paris
- (72) Dietrich Wolf **Presently:** Univ. Duisberg, Germany

- (73) Pedro Bernaola **Presently**: Professor of Physics, Univ. Malaga, Malaga, Spain
- (74) Giancarlo Franzese **Presently**: Professor, Univ. of Barcelona
- (75) Alessandro Chessa **Presently**: Professor of Physics, Univ. Sardegna, Calabria, Italy
- (76) Bernd Rosenow **Presently**: Asst Professor of Physics, Univ. Kln, Köln, Germany
- (77) Marcia Barbosa **Presently**: Professor of Physics, Univ. Rio Grande da Sul, Porto Alegre, Brazil
- (78) Verena Frohling **Presently**: Univ. Freiburg, Germany
- (79) Boris Podobnik **Presently**: Professor of Physics, Univ. of Zagreb, Zagreb, Croatia
- (80) Francisco Sales: **Presently**: Univ. Rio Grand de Norte, Natal, Brazil
- (81) Yossi Ashkenazy **Presently**: **Presently**: Asst. Prof., Beersheva University, Israel
- (82) Adriano Alencar **Presently**: University of Sao Paolo, Brazil
- (82a) Claire Wyart **Presently**: University of California, Berkeley
- (83) Stefano Mossa **Presently**: University of Paris VI, Jussieu
- (84) Masaki Hoshiyama **Presently**: Univ Tokyo
- (85) Lidia Braunstein **Presently**: University of Mar del Plata, Mar del Plata, Argentina
- (86) Telesforo López-Ciudad **Presently**: Univ of Madrid, Madrid, Spain
- (87) Manuel Marques **Presently**: Univ of Madrid, Madrid, Spain
- (88) André Auto-Moreira **Presently**: Univ of Sao Paolo, Brazil
- (89) Don Baker **Presently**: McGill Univ, Montreal, Canada
- (90) Kensuke Fukuda **Presently**: NTT Research Labs, Tokyo
- (91) Miguel de la Casa **Presently**: Univ of Madrid, Madrid, Spain
- (92) Roberto Consiglio **Presently**: Univ. Rio Grande da Sul, Porto Alegre, Brazil
- (93) Jan W. Kantelhardt **Presently**: Univ of Giessen, Giessen, Germany
- (94) Francisco de los Santos Fernández **Presently**: Univ of Granada, Spain
- (95) Sergey V. Buldyrev **Presently**: Professor of Physics and Chair, Physics Department, Yeshiva Univ, New York
- (96) Plamen Ivanov **Presently**: Lecturer in Medicine, Harvard Medical School
- (97) Luis Cruz-Cruz **Presently**: Assoc. Professor of Physics, Drexel University
- (98) Paulo Netz **Presently**: Univ. Rio Grande da Sul, Porto Alegre, Brazil
- (99) Gerald Paul
- (100) Toshihiro Tanizawa, **Presently**: Kochi University
- (101) Kazuko Yamasaki **Presently**: Tokyo University of Information Science
- (102) Jan Nagler
- (103) Philipp Weber
- (104) Gennady Genkin
- (105) Nelido Gonzalez-Segredo **Presently**: ETH, Zurich
- (106) Woo-Sung Jung. **Presently**: Assistant Professor, Department of Physics Pohang University of Science and Technology (POSTECH), Pohang 790-784, Republic of Korea
- (107) Daniel T. Schmitt
- (108) Yougui Wang **Presently**: Beijing Normal University
- (109) Yinlin Xu
- (110) Moo-Young Choi **Presently**: Seoul National University
- (111) Shwu-Jane Shieh
- (112) Joon-Young Moon. **Presently**: Nonlinear & Complex Systems Lab. POSTECH, Pohang, Korea
- (113) Pandelis Perakakis
- (114) Wenqi Duan
- (115) Tobias Preis
- (116) Fengzhong Wang
- (117) Jiping Huang
- (118) Laurent Seuront
- (119) Sadha Moodley
- (120) Eudenilson Albuquerque
- (121) Fabio Pammolli
- (122) Massimo Riccaboni

- (123) Mario Bertella
- (124) Yusong Tu
- (125) Dario Corradini
- (126) Jonathas Silva
- (127) Helen Susannah Moat
- (128) Gaogao Dong
- (129) Huijiang Wang
- (130) Zhiqiang Jiang
- (131) Rujin Du
- (132) Dror Kenett
- (133) J. S. Andrade Jr
- (134) Xin (Siva) Zhang
- (135) Wen Fang
- (136) Chang-Shuai Li
- (137) Xiaojun Zhao
- (138) Simone Mainardi
- (139) Paolo Sgrignoli
- (140) Tolga Ulusoy
- (141) Jean Wu
- (142) Henio Aragao
- (142) Carles Calero
- (143) Xiaobing Feng
- (144) Sary Levy-Carciente, Fulbright Fellow
- (145) Qianming Zhang
- (146) Ying-Hui SHAO
- (147) Xiaobing FENG
- (148) Linyuan Lu
- (149) Gao Li
- (150) Gang Sun

PRINCIPAL INVITED TALKS

- (1) Invited Talk, Ninth Latin American School of Physics, Santiago, Chile, July 1967.
- (2) Invited Talk, *International Conference on Electron Charge and Spin Density*, Sagamore, New York, September, 1967.
- (3) Invited Talk, *Solid State Physics Conference*, Lake Candlewood, California, June 1969.
- (4) Invited Talk, *International Conference on Dynamical Aspects of Critical Phenomena*, Fordham University, New York, June 1970.
- (5) Invited Talk, *Enrico Fermi Summer School on Critical Phenomena*, Varenna, Italy, July 1970.
- (6) Invited Talk, *NATO Summer Institute on Mathematical Physics*, Istanbul, Turkey, August 1970.
- (7) Invited Talk, *NATO Advanced Study Institute on Magnetism*, Nice, France, September 1970.
- (8) Invited Talk, *NATO Winter Institute on Structural Phase Transitions and Soft Modes*, Geilo, Norway, April 1971.
- (9) Opening address, *Iowa Science Symposium*, November 1971.
- (10) Opening address, Mayo Clinic Symposium, *Membranes, Viruses, and Immune Mechanisms in Clinical and Experimental Diseases*, June 1972.
- (11) Invited Talk (with S. Milošević, D. Karo, and R. Krasnow), *Thirteenth International Conference on Low-Temperature Physics* (“LT-13”), Boulder, Colorado, August 1972.
- (12) Invited Talk (with D. W. Hamilton, F.A. Jenkins, and M. Dym), *American Association of Anatomists Annual Meeting*, April 1973.
- (13) Principal Invited Speaker (6 lectures), *Enrico Fermi Summer School on Local Phenomena near Phase Transitions*, Varenna, Italy, July 1973.
- (14) Invited Talk (with L. Liu), International Workshop on *Physics in Less than Three Dimensions*, July 1973.

- (15) Invited Talk, *International Workshop on Applications of Statistical Mechanics to Cooperative Phenomena*, Dartmouth College, August 1973.
- (16) Invited Talk (with S. Milošević), *International Congress on Magnetism*, Moscow, U.S.S.R., August 1973.
- (17) Invited Talk, *Conference on Cooperative Phenomena*, Portoroz, Yugoslavia, June 1974.
- (18) Invited Talk, *Latin American School of Physics*, Mexico City, July 1974.
- (19) Invited Talk (with K. J. Rothschild), *Eighth Annual Symposium of American Society of Clinical Pathologists*, Washington, D.C., 9 October 1974.
- (20) Invited Talk (with E. B. Carew and I. M. Asher), *Symposium on the Physiology of Smooth Muscle*, Kiev, U.S.S.R., October 1974.
- (21) Invited Talk, American Physical Society, May 1975 (Kent, Ohio).
- (22) Opening address, *Fourth International Peptides Symposium*, sponsored by the New York Academy of Sciences, Mount Sinai School of Medicine, June 1975.
- (23) Invited Talk, *Nozawa Summer School in Solid State Physics*, Nozawa, Nagano Pref., Japan, July 1975.
- (24) Invited Talk, American Chemical Society, Semi-Annual Meeting (Symposium on Peptides and Proteins), Chicago, Illinois, August 1975.
- (25) Invited Talk, *International Conference on Low-Lying Vibrational Modes and Their Relationship to Super-Conductivity and Ferroelectricity*, San Juan, P.R., 1-5 December 1975 (with V. Yurkevich).
- (26) Invited Panelist, "Future Directions in Critical Phenomena" *Magnetism & Magnetic Materials Meeting*, Pittsburgh, Penna., June 1976.
- (27) Invited Talk, FEBS Meeting, Copenhagen, 14-19 August 1977.
- (28) Opening address, Thirteenth Annual TransCanada Undergraduate Physics Conference, 7-9 Oct. 1977.
- (29) Opening address, *Faraday Symposium "Critical Phenomena in Fluid Phases"* University of Bristol, Bristol, England, April 1979.
- (30) Invited Talk, Societ  Francaise de Physique, Marseille, France, 16 May 1979 (delivered by J. Teixeira)
- (31) Opening address, *International Symposium on Synergetics*, Center of Interdisciplinary Research, University of Bielefeld, West Germany, 23-30 September 1979.
- (32) Invited Talk, Sixth Brazilian *Symposium on Theoretical Physics*, Rio de Janeiro, 7-18 January 1980.
- (33) "Geometric versus Thermal Phase Transitions" (6 invited talks), Centro Brasileiro de Pesquisas Fısicas, Rio de Janeiro, 7-18 January 1980.
- (34) Invited Talk, NSF Workshop on *New Directions in Polymer Physics*, NSF Institute for Theor. Physics, University of California, Santa Barbara, California, 21-25 January 1980.
- (35) Invited Panelist, "Physics in Low Dimensions" American Physical Society Meeting (New England Section). April 1980.
- (36) Invited Talk, NSF-CNRS Franco-American Conference on Polymers, Lac-du-Flambeau, Wisconsin, 16-20 June 1980.
- (37) Invited Talk, Gordon Conference on *Water and Aqueous Solutions*, Holderness School, Plymouth, New Hampshire, 18-23 July 1980.
- (38) Invited Talk, *IUPAP International Conference on Statistical Mechanics (STATPHYS 14)*, Edmonton, Alberta Canada, 22-28 August 1980.
- (39) Opening address, *International Workshop on Water Structure*, Rome, Italy, 11-12 May 1981.
- (40) Invited Talk, *International Conference on Disordered Systems and Localization*, Rome, 13-15 May 1981.
- (41) "Polymers and Random Systems" (a series of 10 invited lectures), Peking University and Nanking University, June 1981.
- (42) Invited Lectures, *NATO International Summer Institute on Theoretical Physics*, Freiburg, West Germany, 31 August-11 September 1981.
- (43) Invited Talk on Statistical Mechanics of Water, *46th Statistical Mechanics Meeting*, Rutgers University, December 1981.
- (44) Invited Talk, *European Meeting on Water and Associated Liquids*, Pisa, Italy, 31 March - 2 April 1982.
- (45) Invited Talk, *International Conference on Two-Dimensional Membrane Phenomena*, Nova Scotia, 4-11 July 1982.
- (46) Invited Talk, *International Conference on Magnetism Satellite Meeting*, Tokyo, 11-13 September 1982.
- (47) Invited Talk, *American Physical Society*, Philadelphia, 3-5 November 1982.

- (48) Invited Talk, *International Conference on Dynamics of Macromolecules* [Institute of Theoretical Physics, December 1982 University of California at Santa Barbara].
- (49) Invited Talk, *International Workshop on Statistical Mechanics*, Weizmann Institute, ISRAEL. July 1983.
- (50) Invited Talk, *Symposium on Scaling Phenomena in Disorderly Growth Processes*, Princeton, NJ, Aug. 1983.
- (51) Invited Talk, *International Conference on Fractals*, Gaithersburg MD, November 1983.
- (52) Opening Address, *All-Caribbean Physics Conference*, University of West Indies, January 1984.
- (53) Invited Talk, *American Physical Society*, Detroit, 26-30 March 1984.
- (54) Invited Talk, *International Conference on Kinetics of Aggregation and Gelation*. April 1984.
- (55) Invited Talk, *International Conference on Structure of Water*, Grenoble, France, 15-18 April 1984.
- (56) Invited Talk, *NSF-CNRS Workshop on Polymer Structure*, Sofia Antipolis, France, 16-20 April 1984.
- (57) Invited Talk, *NATO Advanced Study Institute on Frontiers of Non-Equilibrium Statistical Physics*, Santa Fe, New Mexico, 3-16 June 1984.
- (58) Invited Talk, *Microsymposium on Polymer Structure*, Prague, Czechoslovakia, July 1984.
- (59) Invited Talk, *Gordon Research Conference on Physics and Chemistry of Water*, 6-10 August 1984.
- (60) Invited Talk, *NSF-CNRS Workshop on Aggregation and Gelation*, Saclay, France, 15-30 September 1984.
- (61) Invited Talk, *Materials Research Society Annual Meeting*, Boston, 26-28 November 1984.
- (62) Invited Talk, *Les Houches Workshop on Finely Divided Matter*, Les Houches, France, 24 March - 5 April 1985.
- (63) Invited Talk, *NATO Conference on Fractals in Materials Science*, Geilo, Norway, 8-19 April 1985.
- (64) Invited Talk, *NATO Summer School on Growth Phenomena*, Cargèse, Corsica, 27 June - 5 July 1985.
- (65) Invited Talk, *Fractals Conference*, Trieste, Italy, 8-12 July 1985.
- (66) Invited Talk, *Gordon Research Conference*, July 1985 [talk delivered by postdoctoral student F. Leyvraz]
- (67) Opening Address, *Latin American School of Physics*, Cali, Columbia, July 1985. [talk delivered by postdoctoral student H. J. Herrmann]
- (68) Invited Talk, *American Physical Society*, University of Georgia, December 1985.
- (69) Invited Talk, *NSF Institute for Mathematics and Its Applications*, University of Minnesota, February 1986.
- (70) Invited Talk, *Gordon Research Conference*, July 1986.
- (71) Invited Talk, *IBM Conference on Fractals*, Oberlech, Austria, July 1986.
- (72) Opening address, *Royal Society of Chemistry*, 10 September 1986 (Manchester, England).
- (73) Invited Talk, *CECAM Workshop: Dynamics on Fractals and Hierarchies of Critical Exponents*, University of Paris (Orsay), 29 September – 10 October 1986.
- (74) Invited Talk, *International Conference on Viscous Flow, Pattern Formation, and Solidification*, University of Tübingen, 27-31 October 1986.
- (75) Invited Talk, *Materials Research Society Annual Meeting*, Boston, 1-5 December 1986.
- (76) Invited Talk, *International Conference on Conductance of Disordered Materials*, Bar-Ilan University, 3-7 January 1987.
- (77) Invited Talk, *International Conference on the Physics of Chaos and Systems Far from Equilibrium*, Monterey, 11-14 January 1987.
- (78) Invited Talk, *International Conference on Physics and Engineering of Crystal Growth*, Pittsburgh, PA, 21-24 February 1987.
- (79) Invited Talk, *Bioengineering Conference*, University of Pennsylvania, 10-15 March 1987.
- (80) Invited Talk, American Physical Society, *Course on Polymer Physics*, NYC, 15-20 March 1987.
- (81) Invited Talk, *NATO Advanced Study Institute: Dynamic Aspects of Conductance in Disordered Materials*, Geilo, Norway (29 March – 10 April 1987).
- (82) Invited Talk, *International Conference on Physics of Porous Materials*, Trieste, Italy, 15-27 August 1987.
- (83) Invited Talk, *International Conference on the Microphysics of Enzyme Catalysis*, Lucca, Italy, 5-9 October 1987.
- (84) Invited Talk, American Physical Society Semi-Annual Symposium, *Physics of Fluids*, Buffalo, NY, 16-17 October 1987.

- (85) Invited Talk, *International Workshop on Polymer Dynamics*, Los Alamos National Laboratory, 2-5 November 1987.
- (86) Invited Talk, International Conference on *Universalities in Condensed Matter Physics*, Les Houches, France, 14-25 March 1988.
- (87) Invited Talk, *American Physical Society*, New Orleans, LA, 24-28 March 1988.
- (88) Invited Talk, *American Physical Society*, Baltimore, MD 18-21 April 1988.
- (89) Invited Talk, *International Workshop on Nonequilibrium Patter Formation in Growth*, Johns Hopkins Univ, Baltimore, MD, 15-17 June 1988.
- (90) Plenary Talk, International Conference on *Nonlinear Variability in Geophysics: Fundamentals and Applications*, Paris, 27 June-1 July 1988.
- (91) Invited Talk, *NATO Advanced Study Institute on Random Fluctuations and Pattern Growth*, Cargèse, France, 18-30 July 1988.
- (92) Invited Participant, *IBM Europe Workshop on High- T_c -Temperature Superconductivity* (K. A. Müller and G. Bednorz, Directors) Oberlech, Austria, 8-12 August 1988.
- (93) Invited Talk, *International Seminar on Cooperative Dynamics in Complex Physical Systems*, Kyoto, Japan, 24-27 August 1988.
- (94) Invited Talk, International Conference ETOPIM (*Electrical Transport and Optical Properties of Inhomogeneous Media*), Paris, France 28 August – 2 September 1988.
- (95) Invited Talk, *International Conference on Fractals in Physics* Erice, Sicily. 10-14 October 1988.
- (96) Invited Talk, *International Workshop on Statistical Physics in Geology*, Asilomar, CA, 11-15 Feb. 1989.
- (97) Invited Talk, *American Physical Society*, St. Louis, MO 20-24 March 1989.
- (98) Invited Talk, *American Chemical Society*, Dallas, TX 10-14 April 1989.
- (99) Invited Talk, *IUPAP International Conference on Statistical Mechanics (STATPHYS-17)*, Rio de Janeiro, 31 July – 4 August 1989.
- (100) Invited Talk, *Ninth International Conference on Crystal Growth*, Sendai, Japan 20-25 August 1989.
- (101) Invited Talk, *Fractals in Physics: In Honor of the 65th Birthday of Professor Benoit Mandelbrot*, Nice, France, 1-4 October 1989.
- (102) Invited Talk, *International Conference on Frontiers in Condensed Matter Physics*, Bar Ilan University, Israel, 8-11 January 1990.
- (103) Invited Talk, *Physics, Chemistry and Materials Science of Clusters*, Lake Arrowhead, California, 21-23 January 1990.
- (104) Invited Talk, *FASEB Meeting*, Washington, DC, 1 April 1990.
- (105) Opening Address, *MECO-17 (17th Conference of the Middle-European Cooperation in Statistical Physics)*, Balatonfüred, Hungary, 22-25 April 1990.
- (106) Invited Talk, *Venture Research Conference*, London, UK, 25-27 June 1990.
- (107) Invited Talk, *NATO Advanced Study Institute on Propagation of Correlations in Constrained Systems*, Cargèse, France, 2-14 July 1990.
- (108) Invited Talk, *Complexity in Physics: Entering the 21st Century*, Stockholm, Sweden, 3-8 September 1990.
- (109) Opening Address, *Random Materials & Processes*, University of West Indies, 18-23 December 1990.
- (110) Invited Talk, *American Physical Society*, N. England Sec., Smith College, 5-6 April 1991.
- (111) Invited Talk, *American Chemical Society*, Atlanta, GA, 14-19 April 1991
- (112) Opening Address, *International Workshop on Physics of Inhomogeneous Materials*, International Center of Theoretical Physics, Trieste, Italy. 10-15 June 1991.
- (113) Final Address, International Conference *Teaching Fractals and Chaos*, Chubu Univ, Nagoya, Japan, 19-24 August 1991.
- (114) Invited Talk, NATO Advanced Research Workshop *Growth Patterns in Physical Sciences and Biology*, Granada, Spain, 7-11 October 1991.
- (115) Opening Address, Molecular Simulations Symposium, *American Physical Society*, Richmond, VA 13-15 Nov. 1991 [talk delivered by postdoctoral student, S. V . Buldyrev]
- (116) Final Address, *International Symposium on Phase Transitions*, Tel Aviv University, 26–27 Dec., 1991.
- (117) Invited Talk, *International Conference on Random Systems*, Calcutta, 27 December 1991–7 Jan. 1992
- (118) Thirtieth Saha Memorial Lecture, Calcutta, January 1992.

- (119) S. N. Bose Memorial Lecture, Calcutta, January 1992.
- (121) Opening Address, Middle Europe *Conference on Statistical Mechanics*, Univ. of Belgrade, Yugoslavia. 31 March - 2 April 1992. [conf. postponed due to civil war]
- (122) Final Address, International Workshop *Surface Disordering: Growth, Roughening and Phase Transitions*, Les Houches, France, 31 March-9 April 1992.
- (123) Invited Talk, International Conference on *Water-Biomolecule Interactions*, Palermo, Italy 1-4 June 1992. [delivered by F. Sciortino]
- (124) Invited Talk, *XVIIth International Workshop on Condensed-Matter Theories*, San Juan, 1-5 June 1992.
- (125) Opening Address, *66th Colloid and Surface Science Symposium*, American Chemical Society, Morgantown, WVA. 14-17 June 1992
- (126) Opening Address, *National Science Foundation Conference on the Applications of Advanced Technologies to Education*, Washington, DC 28-30 June 1992.
- (127) Invited Talk, *Sicilian Academy of Sciences*, Messina, Italy, 3 July 1992.
- (128) Invited Talk, *International Workshop on Complex Fluids*, Polistena, Italy, 6-10 July 1992.
- (129) Invited Talk, *Gordon Research Conference on Dielectric Phenomena*, Plymouth, NH 20-24 July 1992.
- (130) Plenary Talk, *TMP-STATPHYS*, Badajoz, Spain, 20-25 July 1992.
- (131) Opening Address, *International Conference on Fractals and Disordered Systems*, Hamburg, Germany, 27-31 July 1992
- (132) Plenary Talk, *The Elusive Synthesis: Symposium on Aesthetics & Science*, Boston University Center for the History & Philosophy of Science, 16-18 November 1992.
- (133) Invited Talk, *Rutgers Statistical Mechanics Meeting*, 16-18 December 1992.
- (134) Plenary Talk, *Public Science Day '93*, AAAS Annual Meeting, 11-15 February 1993
- (135) Opening Address, *AAAS Symposium: "The Knowledge Navigator"* 11-15 February 1993.
- (136) Plenary Talk, *International Conference on Frontiers in Condensed Matter Physics*, Bar-Ilan University, 15-19 March 1993.
- (137) Invited "Demonstration" National Academy of Sciences Conference, *Reinventing the Schools: The Technology is Now*, Washington DC, 10-12 May 1993.
- (138) Invited Talk, Princeton Materials Institute Conference '*Materials Under Extreme Conditions*', Princeton University, 16-18 May 1993.
- (139) Opening Talk, *IUPAP Topical Symposium: Order-Disorder Transitions and Criticality*, Taipei, Taiwan, 1-7 August 1993.
- (140) Invited panelist, NATO Advanced Research Workshop: *Hydrogen-Bonded Networks*, Cargese, France, 16-22 August 1993.
- (141) Opening Talk, *International Conference on Fractals in the Natural Sciences*, Budapest, 30 August-3 September 1993.
- (142) Invited Talk, *International Conference on Complex Systems in Computational Physics*, Buenos Aires, Argentina, 18-22 October 1993 [delivered by S. Havlin].
- (143) Invited Talk, *International Conference on Fracture*, Tokyo, Japan, 14-17 November 1993.
- (144) Invited Talk, *International Conference on the Structure of Water*, Kyoto, Japan, 13-16 March 1994.
- (145) Invited Talk, *Gordon Research Conference on Fractals*, San Miniato, Italy, 1-6 May 1994.
- (146) Invited Talk, *Max Born Symposium, Kudowa Zdroj, Poland* 1-5 June 1994.
- (147) Opening Talk, *CPiP'94 "Collective Phenomena in Polymers"*, London, Ontario, 15-17 June 1994
- (148) Invited Talk, *International Conference on Lévy Walks and Lévy Flights*, Nice, France, 26-29 June 1994
- (149) Invited Talk, *International Conference on Scaling Concepts and Complex Fluids*, Catanzaro, 4-9 July 1994.
- (150) Opening talk, *Gordon Research Conference on Water and Aqueous Solutions*, Holderness School, 8-12 August 1994.
- (151) Invited Talk, *International Conference on Fractality, Non-linear Dynamics, and Self-Organization of Complex Systems*, University of Würzburg, 1-3 October 1994.
- (152) Invited Talk, *Biomedical Engineering Society*, Tempe, AZ, 14-16 October 1994.
- (153) Invited Talk, *Foundation for Nonlinear Dynamics*, Baltimore, MD 31 Oct-2 November 1994.
- (154) Invited Panelist, *International Conference on Supercomputing*, Wash, DC 14-18 November 1994.
- (155) Invited Talk, *Materials Research Society*, annual meeting, Boston, MA 28 Nov-3 Dec 1994.

- (156) Invited Talk, *Biophysical Society*, San Francisco, 12–17 Feb. 1995
- (157) Invited Talk, *American Physical Society*, San Jose, 20–25 March 1995.
- (158) Invited Talk, NATO ASI *Physics of Biomaterials: Fluctuations, Selfassembly and Evolution*, Geilo, Norway 27 March – 6 April 1995.
- (159) Invited Talk, *International Conference on Colloid and Interface Science*, Guanica, PR 2–5 May 1995.
- (160) Opening talk, *International Conference on Future of Fractals*, Nagoya, Japan, July 1995
- (161) Invited Talk, *International Conference on Dynamics of Complex Systems*, Calcutta, 6–12 August 1995.
- (162) Invited Talk, *Europhysics Conference on Gels*, Balatonszeplak, Hungary, September 25–29, 1995.
- (163) Invited Panelist, *Increasing the Impact of Advanced Technology on the Education Market*, Software Publishers Association (Annual Meeting), Boston, MA, 27–30 September 1995.
- (163) Invited Talk, *American Chemical Society Symposium on Computer Modeling of Polymers*, Rochester, 22–25 October 1995.
- (164) Invited Talk, Japan Assoc. for the Advancement of Res. Cooperation (JAREC) *International Workshop on Water and Biological Systems*, Tokyo. 12–14 November 1995.
- (165) Invited Talk, *Third International Conference on Computational Physics*, Chung-Yuan Christian University, Chung-Li, Taiwan, 13–17 November 1995.
- (166) Invited Talk, *International Workshop on Complex Fluids*, Oaxaca, Mexico, 4–9 January 1996).
- (167) Opening Talk, *International Conference on Pattern formation and fractals in science and technology*. Sydney, 3–6 January 1996.
- (168) Opening Talk, *Puerto Rico Physical Society Meeting*, 9 March 1996.
- (169) Invited Talk, *International Workshop on Problems in Mathematical Physics* (in honor of Prof. Bernard Jancovici). San Juan, 14–16 March 1996.
- (170) Invited Talk, *International Conference on Pattern Formation in Fluids and Materials*, Univ. W. Ontario, London. 13–15 June 1996.
- (171) Invited Talk, Annual Meeting, *American Chemical Society*, Orlando. 25–29 August 1996.
- (172) Plenary Talk, Thirtieth Annual meeting, *Brazilian Physical Society*, Sao Paulo. Brazil. 1–5 September 1996.
- (173) Plenary Talk, *Physics Computing 96 (APS/EPS Annual Mtg)*, Krakow, Poland, 16–21 Sep 1996. Elected to receive prize for best lecture.
- (174) Plenary Talk, *European Physical Society, Annual Meeting (Condensed Matter Physics)*, York, UK, 16–19 Dec 96
- (175) Plenary Talk (Richtmyer Prize Lecture), *AAPT Annual Meeting*, Phoenix, 5–9 January 1997.
- (176) Plenary Talk, *Lorne Genome Conference*, Lorne, Australia. 17–21 Feb 97
- (177) Plenary Talk, *Scale invariance and Beyond*, Les Houches, March 10-14, 1997
- (178) Plenary Talk, *Minerva Workshop on Mesoscopics, Fractals and Neural Networks*, Eilat, 24-28 Mar 1997.
- (178a) Plenary Talk, *International Conference on Frontiers in Condensed Matter Physics*, Bar-Ilan University, 31 Mar – 4 Apr 1997.
- (179) Invited Talk, *American Physical Society*, Washington, DC 19–23 Apr 1997
- (180) Invited talk, *International Conf. on The Morphology and Kinetics of Phase Separating Complex Fluids*, Messina, Italy. 24-28 June 1997.
- (181) Five invited Lectures, *School on Non-Linear Dynamics*, International Centre of Condensed Matter Physics, Brasilia, 14-27 Jul 1997
- (182) Opening talk, *International Workshop on Econophysics*, Budapest, 21-27 July 1997.
- (183) Invited Discussion Leader, *Gordon Research Conf on Liquids*, Holderness School, 3-7 Aug 1997.
- (184) Keynote Speaker, *International Symposium on Localization Phenomena and Dynamics of Brittle and Granular Systems* Columbia University, 6-9 Aug 1997
- (185) Plenary Talk, *Physics and Chemistry of Water and Ice*, Gifu, Japan, 21-25 Aug 1997.
- (186) Opening Talk, Symposium on Water and Ice *International Conference on High Pressure Science and Technology AIRAPT-16 & HPCJ-38*, Kyoto, Japan, 25–29 Aug 1997.
- (187) Opening Plenary Talk. *International Conf on Structure and Function of Biological Systems under Extreme Conditions*, Ritsumeikan University, Keihanna Plaza, Kyoto, 30 Aug – 2 Sep 1997.
- (188) Invited Talk, *International School of Astrophysics ‘D. Chalonge’ : Current Topics in Astrofundamental Physics* (NATO Adv. Study Inst.) Erice - Sicily, 4 - 15 Sep 1997

- (189) Invited Talk, *Physics of Dry Granular Media* (NATO-Adv.Study Inst.), Cargèse, France. 15–27 Sep 1997
- (190) Opening Plenary Talk, *All-Spain Conf on Statistical Mechanics*, Madrid, 25-28 Sep 1997
- (191) Three Plenary Talks, *LAWN-1997—V. Latin American Conference on Nonlinear Phenomena*, Canela, Porto Alegre, Brazil, 29 Sep – 3 Oct 1997
- (192) Invited Speaker, *5th Chemical Congress of North America* organized by the chemical societies of Canada, US and Mexico, Cancun, Mexico, 11-15 Nov 97.
- (193) Invited Talk, *Rutgers Statistical Mechanics Meeting*, 14–16 December 1997.
- (194) Invited talk, *Novartis foundation/ Royal Society Discussion Meeting on Mechanics of Granular Materials*, 28-30 Jan 1998 (talk delivered by P. R. King)
- (195) Invited Talk, *American Physical Society*, Los Angeles, CA. 16-20 Mar 1998.
- (196) Invited Talk (talk given by P. R. King) International Workshop on "Modelling Permeable Rocks" IMA (Institute of Mathematics and its Applications), Cambridge, UK. 23-25 Mar 1998.
- (197) Invited Talk, *International Symposium on Progress and Challenges in Complexity: Physics to Biology (Hayashibara Forum)*, Okayama, Japan. 13-16 April 1998.
- (198) Invited Mini-course (4 lectures), NATO Advanced Study Institute on *Hydration processes in biology: Theoretical and experimental approaches*, Les Houches, 5-15 May 1998
- (199) Invited Talk, International Workshop on Predictability, Los Alamos Center for Nonlinear Studies, 11-15 May 1998
- (200) Invited Talk, 11th Max Born Symposium, "Anomalous diffusion: From basis to applications" Łódź Zdroj, 20-24 May 1998
- (201) Invited Talk, Gordon Conf "Research at High Pressures" June 21-26, 1998
- (202) Invited Talk, Gordon Conf "Pattern Formation in Earth Science" July 4-8, 1998
- (203) Opening Talk, *International Conference on Percolation and Disordered Systems: Theory and Applications*, Giessen, Germany 14-18 July 1998
- (204) Opening Talk, *EPS-IUPAP-IOP 1998 Conference on Computational Physics* Granada, 1-5 Sep 1998
- (205) Opening Talk, *International Workshop on Granular Materials*, 17th Meeting of the Condensed Matter Division of the European Physical Society, Lyon, 6-11 September 1998
- (206) Opening Plenary Talk, *Int'l, Workshop on Econophysics and Statistical Finance*, Palermo, 28-30 September 1998
- (207) Plenary Talk, *International Conf. on Fractals*, Malta, 24-28 October 1998
- (208) Plenary Talk, *New Horizons in Science: 24th Annual Conf. the Council for the Advancement of Science Writing*, Boston, MA, 1-5 November 1998.
- (209) Plenary Talk, *Tohwa Symposium'98 on Slow Dynamics in Complex Systems*, Fukuoka, 9-14 November 1998
- (210) Plenary Talk (Turnbull Prize Lecture), *Materials Research Society Annual Meeting*, Boston, 29 Nov-4 Dec 1998.
- (211) Invited talk, *International Conference on Liquid Crystals and Soft Condensed Matter*, Raman Research Institute, Bangalore, India 28-31 December 1998
- (212) Closing Plenary Talk, *Anniversary Meeting of the Indian National Science Academy, "Physics at the Turn of the Century"*, Chennai, 29-31 December 1998.
- (213) Opening Plenary Talk, *IUPAP International Conference on Statistical Physics*, Calcutta, 3-9 Jan. 1999.
- (214) Plenary Talk, American Physical Society, New England Section, Yale University, 9 April 1999.
- (215) Invited Talk, *Rutgers Statistical Mechanics Meeting in honor of George Stell*, 9–11 May 1999.
- (216) Opening Talk, XII Max Born Symposium, Wrocław, Poland 26-30 May 1999.
- (217) Opening Talk, *International Workshop on Facets of Universality in Complex Systems: Climate, Biodynamics and Stock Markets*, Schloss Rauischholzhausen, 7-10 June 1999.
- (218) Plenary talk, *ICTP Adriatico Research Conference on Liquids*, International Center for Theoretical Physics, Trieste, 26 June — 2 July 1999.
- (219) Keynote Speaker, *Europhysics Conference on Applications of Physics in Financial Analysis*, Dublin, 15-17 July 1999.
- (220) Opening Talk, Symposium on Water and Ice *International Conference on High Pressure Science and Technology AIRAPT-17*, Honolulu, 25-30 July 1999.

- (221) Plenary talk, International IUPAP Conference on equilibrium and nonequilibrium phase transitions, Taipei, 10-16 August 1999.
- (222) Plenary talk, International Workshop on "Stochastic and Chaotic Dynamics in the Lakes", Ambleside, 16-20 August 1999.
- (223) Invited Speaker, *Am Chem Soc National Meeting: "Water in Chemistry and Biology" Symposium*, New Orleans, 22-26 August 1999.
- (224) Invited Speaker, International Conference on Water and Steam (ICPWS), Toronto, 12-16 September 1999
- (225) Opening talk, International Conference "Metastable Water 1999", Schloss Nordkirchen, 22-26 Sep 1999
- (225a) Invited talk, International Conference on Econophysics, Traffic, and Granular Media, Univ. Stuttgart, 26-30 Sep 1999
- (226) Invited talk, LAWNP'99, VI Latin American Workshop on Non-Linear Phenomena, Huerta Grande, Cordoba, Argentina, 11-15 October 1999.
- (227) Invited talk, Annual meeting of the Southeastern Section of the American Chemical Society, Knoxville, TN. 17-20 Oct 1999.
- (228) Invited talk, *International Conference on the Physics of Complex Systems* Messina, Italy October 31 - November 3 1999.
- (229) Plenary Talk, *International Conference on Statistical Physics*, Fukuoka, Japan, 8-12 November 1999
- (230) Plenary Talk, *International Conf on Statistical Physics* Cuernavaca, Mexico, 4-8 Jan 2000
- (231) Plenary Talk, *Escuela Sobre Fisica y Economia* Guanajuato, Mexico, 9-13 Jan 2000
- (232) Invited talk, Karpacz Winter School on Statistical Physics, Karpacz, Poland, 11-19 Feb 2000
- (233) Opening Talk, International School on "The Mathematical Modelling of Financial Markets and Econophysics" Certosa di Pontignano in Siena, Italy, March 17-23, 2000.
- (234) Invited talk, American Physical Society March Meeting, Minneapolis, March 20-24, 2000.
- (235) Opening Talk, International Conference on Economic Dynamics from the Physics Point of View, Bad Honnef, 27-30 March 2000
- (236) Opening Talk, International Workshop on Scaling and Disordered Systems, Paris, April 13-14, 2000
- (237) Invited Talk, *Rutgers Statistical Mechanics Meeting in honor of Joel L. Lebowitz*, 7-9 May 2000.
- (238) Invited Talk, *International Econophysics Workshop "Beyond Efficiency"*, Santa Fe Institute, 17-20 May 2000.
- (239) Invited Talk, ICCS: International Conference on Complex Systems, Salem, NH, 22-25 May 2000
- (240) Opening Keynote Talk, 6th International conference on Science and Technology Indicators, Leiden (Netherlands), 24-27 May 2000.
- (241) Invited Talk, 14th Symposium on Thermophysical Properties, Boulder, Colorado, June 25-30, 2000.
- (242) Invited talk, Gordon Conference "Physics and Chemistry of Water and Aqueous Solutions" Holderness School, 5-11 Aug 2000.
- (243) Keynote Lecture Series (4 talks): Asia-Pacific Center for Theoretical Physics, Seoul National University, 18-19 Sep 2000
- (244) Keynote Lecture (to general public): Econophysics (sponsored by Reuters Japan), Tokyo, 22 Sep. 2000.
- (245) Keynote Lectura, Annual Meeting of Japan Physical Society, Niigata, 23 September 2000
- (246) Keynote Lecture "for nonspecialists", Bell Labs "Distinguished Lecture Series" 6 October 2000. [simul-cast to all Bell Lab locations]
- (247) Invited talk, IUPAP-sponsored "International Conference on New Trends in the Fractal Aspects of Complex Systems" Maceio, Brazil 16-20 October 2000.
- (248) Opening Talk, Symposium on Empirical Science of Financial Fluctuation (sponsored by Nikkei), Tokyo, 15-17 November 2000
- (249) Invited talk, International Workshop on Scattering Studies of Mesoscopic Scale Structure and Dynamics in Soft Matter, Messina, Italy- November 22-25, 2000
- (250) Opening talk, 2d Latin American Summer School on Instabilities and Nonlinear Dynamics : Applications in Natural and Socio-Economical Systems. Valparaiso, December 11- 15, 2000.
- (251) Opening talk, NATO Advanced Research Workshop on Application of Physics in Economic Modelling, Prague, 8-10 Feb 2001.
- (252) Invited talk, International Workshop on Wetting of Structured Materials, Bad Honnef, 12-14 Feb 2001

- (253) Invited talk, American Physical Society March Meeting, Seattle (12-16 March, 2001).
- (254) Invited talk, Arthur M. Sacker Colloquium Self-Organized Complexity in the Physical, Biological, and Social Sciences Irvine, California, March 23-24, 2001
- (255) Plenary talk, International Workshop on Frontiers in the Physics of Complex Systems, Dead Sea, Israel, March 25-28, 2001
- (256) Invited talk, American Chemical Society Annual Meeting, San Diego, 1-6 April 2001.
- (257) Invited talk, International Workshop on Patterns - Trends - Predictions, Florida Atlantic University, 9-12 May 2001.
- (258) Invited talk, International Workshop on Demons, Waelets and Chaos, Amsterdam, 7 June 2001
- (258a) Invited talk, NATO Advanced Research Workshop: "New kinds of phase transitions: Transformations in disordered substances", Volga river, Russia, 24-28 May 2001.
- (259) Invited talk, "March Meeting" of Italian Physical Society, Rome, 18-22 June 2001.
- (260) Invited talk, International Conference on Relaxations in Complex Systems, Hersonissos, Heraklion, Crete, 18-25 Jun 2001
- (260a) Invited talk, American Physical Society, Annual Meeting of DCOMP (Div of Computational Physics), MIT, 25-28 Jun 2001.
- (261) Invited talk, International Workshop "Scaling Concepts and Complex Systems" Merida, Yucatan, Mexico, 9-14 July 2001.
- (262) Invited Talk, IUPAP International Conference on Statistical Physics Statphys-21, Cancun, Mexico, 15-19 Jul 2001.
- (263) Invited talk, International Workshop "Challenges in Computational Statistical Physics in the 21st Century" Athens, GA July 23 - 25, 2001
- (264) Invited talk, European meeting of the Econometric Society (Lausanne, 26-29 August 2001)
- (265) Invited talk, The First International Symposium on Advanced Fluid Information (AFI-2001) 4-5 Oct 2001, Mt. Zao, Miyagi, Japan.
- (266) Opening talk, SFI Economy as an Evolving Complex System III, Santa Fe Institute, 16-18 November 2001.
- (267) Invited talk, *Cambridge Colloquium on Complexity and Social Networks*, Harvard University Kennedy School of Government, 29 October 2001.
- (268) Keynote talk, International Symposium on Slow Dynamical Processes in Nature. Seoul, Korea, 25-27 November 2001.
- (269) Invited talk, "Complex Systems: Questions to Address in the Next 60 Years" International Conference on Horizons in Complex Systems, Messina, Italy, 5-8 December 2001.
- (270) Invited Talk, *Rutgers Statistical Mechanics Meeting in honor of Michael E. Fisher*, 16-18 Dec. 2001.
- (271) Invited talk, International Conference on Slow Dynamics and Glass Transition, Bangalore, India, 6-10 Jan. 2002
- (272) Plenary Talk, International Conference on Long Range Dependent Stochastic Processes and their Applications, Bangalore, India, 7-12 January 2002.
- (273) Plenary Talk, International Conf. on Statistical Physics: "Statphys - Kolkata IV", Calcutta, India, 14-19 January 2002
- (274) Keynote speaker, NATO Advanced Research Workshop *Liquids Under Negative Pressure* Budapest, 23-25 February, 2002
- (275) Invited talk, First SIAM Conference on Life Sciences, Boston, March 6 - 8, 2002.
- (276) Plenary Lecture, International Workshop on "DNA in chromatin: biophysics of single molecules, biology and genomics" Arcachon (France) 23-29 March 2002.
- (277) Invited lecture Course, *Protein Aggregation: An Interdisciplinary School*, Les Houches, France, 9-18 April 2002.
- (278) Plenary talk, Mid-Atlantic Meeting on Thermodynamics 2002 "Thermo-2002", University of Maryland, 19-20 April 2002.
- (279) Opening plenary talk, International Workshop on Economics with Heterogeneous Interacting Agents (WEHIA), International Center for Theoretical Physics (ICTP), Trieste, 30 May - 1 Jun 2002.
- (280) Plenary talk, XVIII Sitges Conference "Statistical Mechanics of Complex Networks", Sitges, Spain, 10-14 June 2002.

- (281) Invited talk, Italian Physical Society (Annual meeting), Bari, Italy, 24-28 June 2002.
- (282) Keynote talk, Third international conference on Unsolved Problems of Noise and fluctuations in physics, biology, and high technology (UPoN'2002), NIH, 3-6 Sep 2002.
- (283) Keynote talk, Annual IFTA (International Federation of Technical Analysts) Conference, London, 10-12 Oct 2002.
- (284) Invited talk, Workshop on Dynamic Social Network Analysis, National Academy of Sciences, Washington, 7-9 November 2002.
- (285) Invited Talk, International Workshop of the "Japan Economics Study Group", Tokyo, 11 Nov. 2002.
- (286) Opening Talk, The Second Nikkei Econophysics Research Workshop and Symposium, Tokyo, 12-14 November 2002.
- (287) Plenary talk, CNS Conference "Networks: Structure, Dynamics and Function" Santa Fe, New Mexico, May 12 - 16, 2003
- (288) Plenary Speaker, SPIE International Symposium on Fluctuations and Noise, Santa Fe, 1-4 June 2003.
- (289) Opening plenary talk, Fifteenth Symposium on Thermophysical Properties, Boulder, CO 22-27 June 2003.
- (290) Invited talk, "Unifying concepts in granular media and glasses" June 25-28, 2003, Villa Orlandi, Capri.
- (291) Invited talk, *Enrico Fermi Summer School on Complex Systems*, Varenna, Italy, 1-11 July 2003.
- (292) Invited talks, 2003 Gordon-Kennan Summer School (GKSS) Course and Workshop in Risk Analysis - August 3 - 15, 2003 - Roger Williams University, Bristol, RI
- (293) Invited talk, Symposium on the Mathematical Challenges Associated with Adaptation and Complexity, U.S. Army Research Office (ARO), Research Triangle Park, NC, 27-28 August 2003
- (294) Invited speaker, Intl. Conference on Growing Networks and Graphs, Rome, 1-5 Sep 2003
- (295) Opening Plenary Talk, International Conf. on Frontiers of Science FS2003, Pavia, Italy 7-12 Sep 2003.
- (296) Opening Plenary Talk, VIII Latin American Workshop on Nonlinear Phenomena (LAWNP'03), Salvador, Brazil, 22-27 September 2003.
- (296a) Plenary Talk, Symposium on Complex Systems, Kellogg School of Management, Northwestern Univ, October 24-25 2003.
- (297) Invited speaker, Int'l Symposium on Slow Dynamics in Complex Systems, Sendai, Japan, 3-8 Nov 2003.
- (298) Keynote Speaker, International Conference on Application of Physics in Financial Analysis (APFA4). Warsaw, 13- 15 November 2003.
- (299) Lectio Magistralis, Institute of Advanced Studies, University of Pavia (in connection with the award of the *Teresiana Medal in Complex Systems Research*, and election to the position of *Honorary Professor*, Institute for Advanced Studies and Complexity Institute, University of Pavia, 17 January 2004.
- (300) Invited Talk, German Physical Society, 8-12 March 2004, Regensburg
- (301) Invited talk, International Workshop on the Physics of Viscous Liquids, March 14-17, 2004, Munich
- (302) Opening keynote talk, 12th IEEE Nonlinear Dynamics of Electronic Systems (NDES2004), 9-13 May 2004, Evora, Portugal.
- (303) Plenary Talk, Royal Society Discussion Meeting on the topic of "Configurational landscapes and structural transitions in clusters, fluids and biomolecules", 19-20 April 2004, London.
- (304) Ludwig Boltzmann Lecture (plenary), IUPAP International Conference on Statistical Physics Statphys-22, Bangalore, India, 4-11 July 2004.
- (305) Keynote (banquet) Speaker, 13th International Conference on the Discrete Simulation of Fluid Dynamics, Cambridge, 15-20 August 2004
- (306) Invited talk, National Academy of Sciences meeting on Terrorism, 7-8 September 2004.
- (307) Plenary Lecture (via satellite Video), 89th Nacional de Fisica Reunion, Bahiablanca, Argentina, 20-23 September 2004.
- (308) Opening Talk, International Workshop on Statistical Physics of Glassy and Non-Equilibrium Systems (SPHINX): Econophysics, 27-29 September 2004, Oxford (UK).
- (309) Plenary Lecture, International Workshop on Wearable Computers for Integrative Patient Monitoring, Boston University, 27-29 October 2004.
- (310) Plenary Lecture, Eleventh Annual CAP Workshop on Derivative Securities and Risk Management, The Center for Applied Probability at Columbia University, 5 Nov 2004.
- (311) Plenary Lecture, International Conference on Econophysics, Tokyo, Japan 9-11 November 2004.

- (312) Plenary Lecture, International Workshop on Water Dynamics, Sendai, Japan, 11-12 November 2004.
- (313) Invited talk, American Physical Society, Annual Meeting, Los Angeles, March 2005.
- (314) Invited talk, "Understanding Terrorist Networks and Organizations," Monterey, CA, April 5-7, 2005.
- (315) Invited talk, NATO Advanced Research Workshop on Soft Matter, Fundamentals and Emerging Technologies, Odessa, Ukraine 8 - 13 October 2005.
- (316) Opening talk, International Conf on Application of Scattering Methods for Investigation of Structure and Dynamics of Soft Condensed Matter November 11-13, 2005, Florence, Italy
- (317) Invited talk, "Understanding Terrorist Networks and Organizations," Washington, DC, 17-18 January, 2006.
- (318) Plenary Talk, International Conf on "Dynamical Arrest in Soft Matter and Colloids", Lugano, Switzerland, 6-9 April 2006.
- (319) Keynote talk, XX Sitges Conference on Statistical Mechanics: *Physical Biology: from Molecular Interactions to Cellular Behavior*, 5-9 Jun 2006
- (320) Opening Keynote Talk, ITINAD (a Scientific Society completely devoted to Alzheimer Disease research). Rome, 8-10 Jun 2006,
- (321) Keynote talk, Eighth International Conf. on Quasi-Elastic Neutron Scattering (QENS), Bloomington, Indiana, 15-17 June 2006
- (322) Invited 10-lecture *Corso di Dottorato di Eccellenza: Applications of Statistical Physics to Understanding Complex Systems*, U. Torino, 28-30 June 2006.
- (323) Opening Keynote Talk, International Conference on Application of Physics in Financial Analysis (APFA-5). Torino, 29 June - 1 July 2006.
- (324) Keynote Speaker, New York Academy of Sciences Symposium on the Interface between Physics and Economics, 7 World Trade Center, 7 November 2006. (with Robert Engle, Dooyne Farmer, and David E. Shaw)
- (325) Keynote Speaker, Pan-American Scientific Institute (PASI) "From disordered systems to complex systems", Mar del Plata, Argentina. 11-20 Dec. 2006
- (326) Opening Talk, International Conference Complexity Metastability and Nonextensivity ("NEXT07") Catania, Sicily, 1-5 July 2007.
- (327) Keynote Talk, International Conference on "Applications of Physics in Financial Analysis" ("APFA6") Lisbon, 4-7 July 2007.
- (328) Invited Talk, International Conference on "Transport, Localization, and Fluctuations in Complex Systems" Ilmenau, Germany. 3-6 September 2007.
- (329) Public Lecture "Physics and Chemistry of Out of Equilibrium Systems" Opening talk in the Symposium *New Frontiers of Science, Art and Thought*, Barcelona, 5-7 September 2007.
- (330) Invited Talk, Trends in Nanotechnology ("TNT2007"), San Sebastian, Spain, 4-8 September 2007.
- (331) Plenary Talk, International Workshop on Complex Systems, Sendai, Japan 25-29 September 2007
- (332) Invited Talk, Conference on Complex-System Models of Large-Scale Social Systems (New England Complex Systems Institute), Quincy, MA 28-30 October 2007.
- (333) Invited Talk, *Rutgers Statistical Mechanics Meeting in honor of Gunther Ahlers, Herman Cummins, Walter Goldberg, Jerry Gollub, Anneke Levelt Sengers, Harry L. Swinney*, 16-18 December 2007.
- (334) Plenary Talk, Joint annual meeting of the *Biophysical Society* and the *16th IUPAB International Biophysics Congress*, Long Beach, CA, 2-6 February 2008.
- (335) Invited Talk, German Physical Society, Annual Meeting, Berlin, 25-29 February 2008.
- (336) Invited Talk, American Physical Society Annual Meeting, New Orleans, LA, 9-14 March 2008.
- (337) Plenary Talk, 50th Anniversary of Phys. Rev. Lett., American Physical Society Annual Meeting, New Orleans, LA, 9-14 March 2008.
- (338) Plenary Talk, International Conference, "Modeling anomalous diffusion and relaxation: from single molecules to the flight of the albatross", Hebrew University, Jerusalem, March 23-28, 2008.
- (339) Plenary Talk, Lilienfeld Prize Acceptance Lecture, American Physical Society April Meeting, St. Louis, MO. New Orleans, LA, 13-16 April 2008.
- (340) Plenary Talk, XXI Sitges Conf: Stat. Mech. of Biophysics, Sitges, Spain, 1-6 June 2008
- (341) Plenary Talk, Conf in honor of Professor David Bergman, Tel Aviv University, 9-11 June 2008

- (342) Plenary Talk, International Workshop "Advances in Resonant Inelastic X-ray Scattering" Uppsala, Sweden, 13-15 June 2008
- (343) Opening Plenary Talk, "International Conference on Economic Science with Heterogeneous Interacting Agents" (ESHIA/WEHIA2008), Warsaw, 18-21 June 2008
- (344) Invited talk, American Chemical Society Annual Meeting, Philadelphia, 17-21 August 2008.
- (345) Invited Talk, "15th International Conference on the Properties of Water and Steam (15th ICPWS)", Berlin, Germany, 7-11 Sept 2008
- (346) Opening Plenary Talk, International Conference on Complexity (ECCS), Jerusalem, 13-16 Sep 2008
- (347) Plenary Talk, Satellite Conf "Large databases in biomedical complex system research", Jerusalem, 15-16 Sep 2008
- (348) Invited Talk (given by G. Franzese), NATO Advanced Research Workshop "Metastability under Pressure" Odessa, Ukraine, 4-8 October 2008.
- (349) Invited Talk, *100th Rutgers Statistical Mechanics Meeting in honor of Joel L. Lebowitz*, 13-17 December 2008.
- (350) Opening Plenary Talk, International Conference on Complexity Science "Complex 09", Shanghai, China, 23-25 February 2009.
- (351) Opening Plenary talk, International Conference on "Applications of Physics in Financial Analysis" ("APFA7") Tokyo, 1-4 March 2009.
- (352) Plenary talk, RIETI Policy Symposium (a public event sponsored by the Research Institute of Economy, Trade and Industry (RIETI)), 5 March 2009
- (353) Plenary talk, Hitotsubashi Interdisciplinary Conference, Tokyo University, 6 March 2009
- (354) Co-Organizer of Task Group 3, *Creating a Science of Networks*, Army/NSF Network Science Workshop, Washington, 26-27 March 2009.
- (355) Opening Talk, *The Science of Complexity*, Eilat, Israel. 30 March - 3 April 2009.
- (356) Plenary Talk, *Symposium on Vision for Research and Development in Simulation-Based Engineering and Science in the Next Decade* National Academy of Science Building, April 22-23, 2009.
- (357) Invited Talk, Symposium on Supercooled Liquids and Glassy Water in honor of the 75th birthday of C. A. Angell, Annual Meeting of American Ceramic Society, Vancouver, BC, 1-5 Jun 2009.
- (358) Invited Talk, International Workshop on Coping with Crises in Complex Socio- Economic Systems, Zurich, June 8-12, 2009.
- (359) Opening talk, International Workshop "Modeling and Simulation of Water at Interfaces from Ambient to Supercooled Conditions" (CECAM Inst, EPFL Lausanne). 29 Jun - 1 Jul 2009.
- (360) Plenary talk, "NetSci 2009" (International Workshop and Conference on Networks Science) Istituto Veneto di Scienze Lettere ed Arti, Venice, Italy, 29 June - 3 July 2009.
- (360a) Plenary talk, International Workshop on High-Frequency Modeling of Financial Phenomena, Stevens University, 10-12 July 2009
- (361) Opening Keynote Talk, International Conf on Interactions among Computer Science, Humanities, Engineering, and Economics, Univ Saskatchewan, 17-20 August 2009.
- (362) Plenary talk (and "Special Scientist Honorific Address"), 6th International Conference on Relaxation Phenomena in Complex systems, Rome. 30 August-5 Sept 2009
- (363) Opening Plenary talk, Horizons in Hydrogen Bond Research, Paris, 14-18 Sep 2009
- (364) Plenary talk, International Symposium on Complex System Science, Paris, 17-18 Sep 2009.
- (365) Honorific Plenary talk, NGS Singapore, 23 September 2009
- (366) Opening Plenary talk, LAWNP-2009: XI Latin American Workshop on Nonlinear Phenomena, Buzios, Rio, 5-9 October 2009.
- (367) Opening Plenary talk, Symposium in Honor of 60th Birthday of Professor A. N. Berker, MIT, 17 October 2009.
- (368) Opening Plenary talk, "5th Flash Conference of ERA-Chemistry: Building and Destroying Molecules in Water" Abtei Frauenwoerth, Chiemsee, Germany 18-22 October 2009
- (369) Opening Plenary talk, "Econophysics Colloquium 2009" Erice, Italy, 26-31 October 2009.
- (370) Concluding Plenary talk, "International Symposium on Complex Systems and Materials", University of Messina, 20 November 2009

- (371) Plenary talk, International Conference on Complex Materials, Academic Sinica, Taiwan, 10-13 December 2009
- (372) Plenary talk, International Conference on Biocomplexity, Chung-Yuan Christian University, Chungli, Taiwan, 14-15 December 2009
- (373) Opening Plenary talk, International Conference on Computational Physics on 16-19 December 2009 (CCP2009) Kaohsiung, Taiwan, 16-20 December 2009
- (374) Plenary talk, the 75th Platinum Jubilee Lecture of the Indian Academy of Science, Homi Bhabha Auditorium, Tata Institute for Fundamental Research, Mumbai, India, 17 December 2009
- (375) Plenary talk, the 75th Platinum Jubilee Lecture of the Indian Academy of Science, IISC, Bangalore, India, 18 December 2009
- (376) Plenary Talk, International Conference on Multiscale Modeling and Simulations of Hard and Soft Materials (MMSM-2009) “Multiscale Modeling of Alzheimer Disease”, Theoretical Sciences Unit Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore India, 12-20 December 2009
- (377) John G. Kirkwood Lecture (opening Plenary talk), “International Conf on Non-Equilibrium Statistical Physics”, Kanpur, India. 30 Jan - 8 Feb 2010
- (377a) Ramanujan Lecture, Kolkata, India 29 Jan 2010 (postponed due to visa rules)
- (378) Invited Talk, AAAS Annual Meeting, San Diego, CA. 18-22 Feb 2010
- (379) Invited Talk, American Physical Society Annual Meeting, Portland, OR. 14-18 March 2010.
- (380) Invited Talk, American Chemical Society Annual Meeting, San Francisco, 21–24 March 2010.
- (381) Opening Plenary talk, “International Conf Liquid State Physics, Tohoku University, Sendai, Japan. 25–28 March 2010.
- (382) Keynote Plenary talk, International Conference on Social Computing, Behavioral Modeling and Prediction (SBP-10), National Institutes of Health, 30–31 March 2010
- (383) Plenary talk, International Workshop on “Physics of Competition and Conflicts,” 26–29 May 2010, Bulgaria
- (384) Plenary talk, “Second International Workshop on High-Frequency Modeling of Financial Phenomena”, Stevens University, 24–27 June 2010.
- (385) Keynote talk, International School on “Multidisciplinary Approaches to Economic and Social Complex Systems,” Collegio Santa Chiara, Siena, Italy, 27 June – 3 July 2010
- (386) Plenary Talk, “New Frontiers in Complex Networks”, Seoul. 12–16 July 2010
- (387) Plenary talk, “Dynamics Days Asia Pacific 6 (DDAP6)”, Sydney, Australia, 12–14 July 2010.
- (388) Plenary Talk, “StatPhysHK: Complexity, Computation and Information” Hong Kong, 14–16 July 2010.
- (389) Opening Plenary Talk, “Unwinding Complexity: Statistical Physics Perspectives on Complex Systems and Complex Materials”, Port Douglas, 24–26 July 2010.
- (390) Plenary Talk, DTRA Conf, Washington, DC 16-18 August 2010.
- (391) Plenary Talk, ONR Conf. “Threat Networks and Threatened Networks”, Carnegie Mellon University, 8-10 September 2010
- (392) Plenary Talk, “Paths in Complexity”, Univ. of Rome, Roma 23-24 September 2010
- (392) Plenary Talk, “International Workshop on Complex Networks - CompleNet”, Rio de Janeiro, 13-15 October 2010
- (393) Plenary Talk, “Dynamic Crossover Phenomena in Water and Other Glass-forming Liquids”, Firenze, Italy, 11-13 November 2010
- (394) Opening Plenary Talk, “Robustness of Complex Networks”, Delft, Netherlands, 14-16 November 2010
- (395) Plenary Talk, “Structure & Dynamics of Water and Aqueous Solutions”, Princeton, NJ 6-8 Dec 2010
- (396) Plenary Talk, “Applications of Statistical Mechanics to Complex Systems”, Budapest, Hungary, 11-13 January 2011
- (397) Opening Keynote Address, Humboldt Kolleg Conf, “Rare Events with Catastrophic Consequences in Complex Systems” Austin, TX (sponsored by Humboldt Foundation), 21-23 Jan 2011
- (398) Opening Keynote Address, “International Symposium on Dynamical Biomarkers for Translational Medicine”, Taipei, 16-17 April 2011.
- (399) Opening Talk, “Stochastic dynamics, agent-based models and Networks [SIAM Conference on Applications of Dynamical Systems (DS11)]” May 22-26, 2011, Snowbird, Utah, USA.

- (400) Opening Keynote Talk, International Symposium on Complexity, University of Shanghai for Science and Technology, 3 June 2011.
- (401) Opening Keynote Talk, International Conference on Econophysics, Shanghai, 4-6 June 2011
- (402) Opening Keynote Talk, Netsci2011 : “Networks of Networks: Systemic Risk and Infrastructural Inter-dependencies”, Budapest 6-10
- (403) Invited Talk, “International Workshop on Non-Perturbative Quantum Chromodynamics” l’Institut d’Astrophysique de Paris, 6-11 June 2011
- (404) Plenary Talk, “International Conference on Complex Systems”, 26June-1 July 2011, Quincy, MA
- (405) Plenary Talk, International Conference on New Development in Condensed Matter Physics, Sabanci University, Istanbul 30 June - 2 July
- (406) Invited Talk, International CECAM - Centre Europeen de Calcul Atomique et Molculaire Conference “Models for Bulk, Confined Water and Aqueous Solutions Upon Supercooling: State of the Art and Future Perspectives in Understanding Water Anomalies by Computer Simulations”, 3-6 July 2011, EPFL Ecole Polytechnique Fedrale de Lausanne, Batochime (BCH), 1015 Lausanne, Switzerland
- (407) Opening Plenary Talk, International Conference on Statistical Physics, Larnaca, Cyprus 11-15 July 2011.
- (408) Plenary talk, International Workshop, Modeling High Frequency Data in Finance, Stevens Institute of Technology, 28-31 July 2011.
- (409) Invited Talk, “Nobel Symposium Number 151: Water in Biology and Medicine, Stockholm, Sweden, 20-23 August 2011 [conference cancelled for political reasons]
- (410) Invited Talk, International Conference on Complex Systems, ECCS11, Vienna, Austria, 11-15 Sep 2011.
- (411) Opening Plenary talk, National Conference on Biology of Signaling in Cardiovascular System, Hyannis, MA 16-20 Oct 2011
- (412) Plenary Talk, International Conference on Complexity in the Oil Industry, Natal, Brazil, 14-18 Nov 2011.
- (413) Invited Talk, International Conference on Unsolved Problems of Noise (UPON), Kolkata, India, 20 Feb 2012
- (414) Ramanujan Lecture, Kolkata, India, 21 Feb 2012
- (415) Invited Talk, Annual Meeting of the German Physical Society, Berlin, 26-28 March 2012
- (416) Plenary Talk, International symposium on “ Meso-scale and Fluctuation Thermodynamics” . University of Maryland, College Park, MD 20742. April 27, 2012
- (417) Opening Keynote Address, International Workshop on Structure and Dynamics of Glassy, Supercooled and Nanoconfined Fluids Buenos Aires, Argentina, 16-18 May 2012
- (418) Opening Talk, International Conference on “Frontiers in statistical physics and complex systems”, Catania (Italy), 2-5 June 2012
- (419) Opening Talk, Special Symposium on Network Education (“NetSciHigh”), International NetSci Conference, Northwestern Univ, Evanston, IL, 18-21 June 2012.
- (420) Opening Talk, Plenary talk, International Workshop, Modeling High Frequency Data in Finance, Stevens Institute of Technology, 18-21 July 2012.
- (421) Opening Talk, International Conference on Cognitive and Information Sciences, IARPA, 22-24 July 2012.
- (422) Opening Talk, Symposium on Interacting Networks, International Conference on ECCS, Brussels, 4-8 Sep 2012
- (423) Lecto Magistralis, on the occasion of Doctorate *Honoris Causa*, Institute for Advanced Studies (IMT Lucca, 24 October 2012)
- (424) Keynote Talk, International Conference on Networks and Social Media, Beijing, 15-16 November 2012
- (425) Invited talk, 4th International Symposium on Slow Dynamics in Complex Systems, Sendai, Japan, 3-8 December 2012
- (426) Invited Talk, Conference on Bio-Softmatter and Complex Systems, Hualien, Taiwan, 28 January 2013
- (427) Opening Plenary Talk, Annual Meeting of the Taiwan Physical Society. Hualien, Taiwan, 29-31 January 2013
- (428) Invited Talk, *American Physical Society*, Baltimore, MD 18-22 March 2013

- (429) Opening Keynote Talk, International Conference on “Frontiers in Condensed Matter Science” Fortaleza, Brazil April 7-10 2013.
- (430) Centennial Ehrenfest Lecture, Univ Leiden, 15 May 2013.
- (431) Lorentz Lectures, Univ Leiden, 3 May 2013, 8 May 2013, and 29 May 2013.
- (432) Opening Keynote Talk, NATO Advanced Study Workshop, Samarkand, Uzbekistan, “New challenges in complex systems physics: Disaster forecasting, crisis modeling, and sustainable development” 20-24 May 2013.
- (433) Final Talk, Lorentz Center Workshop on Econophysics, 27-31 May 2013.
- (434) Invited Talk, International Conference on Network Science “NetSci13,” Copenhagen, 2-5 June 2013.
- (435) Keynote Talk (prize for best talk), Dynamics Days, Madrid, 5-7 June 2013.
- (436) Opening Keynote Talk, Casimir Days, Univ. Delft and Univ Leiden, 7 June 2013.
- (437) Invited Course, *Enrico Fermi Summer School entitled Water: Fundamentals as the Basis for Understanding the Environment & Promoting Technology* 7 - 13 July 2013 Varenna, Italy,
- (438) Invited Talk, *American Chemical Society*, Indianapolis 8-12 Sep 2013.
- (439) Opening Talk, *Statistical modeling, financial data analysis and applications*. Istituto Veneto di Scienze Lettere ed Arti (IVSLA) Palazzo Franchetti, Venice, Italy, 11-14 September 2013
- (440) Plenary Talk, *New Horizons in Science: 39th Annual Conf. the Council for the Advancement of Science Writing*, Gainesville, FL, 1-4 November 2013.
- (441) Internationally broadcast MOOC: “Neutrons in Soft Matter Science: Complex Materials on Mesoscopic Scales” 19 Nov 2013. <http://neutrons.ornl.gov/education/nsms2013/>

CONFERENCES CO-ORGANIZED AND SUMMER INSTITUTES CO-DIRECTED

- (1) International Organizing Committee, *International Conference on Low-Lying Lattice Vibrational Model and their Relationship to Superconductivity and Ferroelectricity*, 1-5 December 1975, San Juan, Puerto Rico.
- (2) Director, Summer Program *Phase Transitions and Critical Phenomena*, M.I.T., Cambridge, MA, July 1970, June 1971, June 1972, June 1973, June 1974, and June 1975.
- (3) Director, Summer Program *Biomedical Physics and Biomaterials Science*, M.I.T., Cambridge, Massachusetts, July 1971, June 1972, June 1973, June 1974, and June 1975.
- (4) International Scientific Organizing Committee, *Statphys-15 IUPAP International Meeting on Statistical Mechanics*, Edinburgh, Scotland, 25-29 July 1983.
- (5) Co-Director, NATO Advanced Study Institute, *On Growth and Form*, Cargèse, France, 27 June - 6 July 1985.
- (6) Co-Organizer, Sixth International Symposium, *Fractals in Physics*, Trieste, Italy, 9-12 July 1985.
- (7) Chair, International Scientific Organizing Committee, *IUPAP Statphys-16*, Boston, MA, 10-16 August 1986.
- (8) Co-Director, NATO Advanced Study Institute, *Random Fluctuations and Pattern Growth*, Cargèse, France, 14-28 July 1988.
- (9) Member, International Organizing Committee, International Conference on Electrical Transport and Optical Properties of Inhomogeneous Media (ETOPIM2), Paris, 29 August - 2 September 1988.
- (10) Member, International Scientific Organizing Committee, *IUPAP International Conference on Statistical Mechanics (STATPHYS-17)*, Rio de Janeiro, August 1989.
- (11) Co-Director, NATO Advanced Study Institute, *Propagation of Correlations in Constrained Systems*, Cargèse, France, 2-14 July 1990.
- (12) Co-Director, *International Workshop on Random Materials & Processes*, University of the West Indies, 18-22 December 1990.
- (13) Member, International Scientific Organizing Committee, *International Conference on Fractals and Disordered Systems*, Hamburg, Germany, 27-31 July 1992
- (14) Member, International Scientific Organizing Committee, *IUPAP International Conference on Statistical Mechanics (STATPHYS-18)*, Berlin, August 1992.
- (15) Member, International Scientific Organizing Committee, *IUPAP Topical Conference: Order-Disorder Transitions and Criticality*, 1-7 August 1993, Taipei.
- (16) Member, International Scientific Organizing Committee, *International Conference on Fractals in the Natural Sciences*, Budapest, 30 August - 3 September 1993.

- (17) Member, International Scientific Organizing Committee, *International Conference on Scaling Concepts and Complex Fluids*, Catanzaro, 4-9 July 1994.
- (18) Member, International Scientific Organizing Committee, *International Working Conference on Fractals in the Natural and Applied Sciences*, Marseille, 8-11 April 1995.
- (19) Member, International Scientific Organizing Committee, *IUPAP Topical Conference on Statistical Physics: Nonlinear and Random Processes*, Taipei. 18-24 July 1995.
- (20) Member, International Scientific Organizing Committee, *International Conference on Future of Fractals*, Nagoya, Japan, July 1995.
- (21) Member, International Scientific Organizing Committee, *IUPAP International Conference on Statistical Mechanics (STATPHYS-19)*, Xiamen, China, August 1995.
- (22) Co-Director, *Materials Research Society Annual Meeting* (Symposium on Disordered Materials and Interfaces), Boston, 27 November – 1 December 1995.
- (23) Co-Director, *Enrico Fermi School on the Physics of Complex Systems*, Varenna, Italy. 9-19 July 1996.
- (24) Vice-Chair, *Gordon Research Conference on Water and Aqueous Solutions*, August 1996 (Chair, August 1998).
- (25) Member, International Scientific Organizing Committee, *International Working Conference on Fractals in the Natural and Applied Sciences*, Denver, 8-11 April 1997.
- (26) Member, International Scientific Organizing Committee, *IUPAP Topical Conference on Statistical Physics: Nonlinear and Random Processes*, Taipei. 4-11 July 1997.
- (27) Member, International Scientific Organizing Committee, *International Conf on Structure and Function of Biological Systems under Extreme Conditions*, Ritsumeikan University, Keihanna Plaza, Kyoto, 30 Aug – 2 Sep 1997.
- (28) Member, International Scientific Organizing Committee, *Physics of Dry Granular Media* (NATO-Adv.Study Inst.), Cargèse, France. 15–27 Sep 1997
- (29) Member, International Scientific Organizing Committee, *International Conference on Percolation and Disordered Systems: Theory and Applications*, Giessen, Germany 14-18 July 1998
- (30) Member, International Scientific Organizing Committee, *IUPAP International Conference on Statistical Mechanics (STATPHYS-20)*, Paris, France, 20-24 July 1998.
- (31) Member, International Scientific Organizing Committee, Conference on Computational Physics (CCP 1998) Granada, Spain, September 2-5 1998.
- (32) Member, International Scientific Organizing Committee, *Int'l, Workshop on Econophysics and Statistical Finance*, Palermo, 28-30 September 1998
- (33) Member, International Scientific Organizing Committee, *International Conference on Fractals in the Natural and Applied Sciences*, Malta, 25-28 October 1998
- (34) Member, International Advisory Committee, Eighth Towa Univ Int'l Symposium on Slow Dynamics in Complex Systems, Fukuoka, Kyushu, Japan, 8-13 Nov 1998.
- (35) International Scientific Organizing Committee, *IUPAP International Workshop on Statistical Physics of Fracture, Breakdown and Earthquakes*, Calcutta, December 1998.
- (36) Co-Director, Nato Advanced Research Workshop *Statistical Physics Applied to Practical Problems*, Budapest, 18-23 May 1998
- (37) Member, International Scientific Organizing Committee, *IUPAP Topical Conference on Statistical Physics: Nonlinear and Random Processes*, Taipei. 10-17 Aug 1999.
- (38) Co-Director, Nato Advanced Research Workshop *Liquid-Liquid Phase Transition Phenomena*, Volga River, 24-28 May 2001.
- (39) Member, International Scientific Organizing Committee, *International Physics of Liquid Matter: Modern Problems*, September 14-19, 2001, Kyiv, Ukraine
- (40) Member, International Scientific Organizing Committee, *Advances in High Pressure Research*, 16-19 Sept 2001, Santander, Spain
- (41) Member, International Scientific Organizing Committee, The First International Symposium on Advanced Fluid Information (AFI-2001) 4-5 Oct 2001, Mt. Zao, Miyagi, Japan.
- (42) Member, International Scientific Organizing Committee, *XXIV International Colloquium on Group Theoretical Methods in Physics* (Paris, July 17-23, 2002).

- (43) Member, International Scientific Organizing Committee, VIII Latin American Workshop on Nonlinear Phenomena (LAWNP'03), Salvador, Brazil, 22–27 September 2003,
- (43) Member, International Advisory Committee, Int'l Symposium on Slow Dynamics in Complex Systems, Sendai, Japan, 3-8 Nov 2003.
- (43) International Advisory Committee for the International Symposium on Advanced Fluid Information. The Institute of Fluid Science, Tohoku University, 2002, 2004,2006
- (44) International Advisory Committee, International Workshop on Granular Systems, Pucon, Chile, December 10- 13, 2003.
- (45) International Scientific Community, 4th International Conference on the Unsolved Problems of Noise (UPoN-2005), Gallipoli (Lecce), Italy, 6-10 Jun 2005.