

Name: H. EUGENE STANLEY **Born:** 28 March 1941, Oklahoma City **Email:** hes@bu.edu
Postal Address: Physics Dept., Boston Univ., Boston, MA 02215 **Tel:** 617.353.2617
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EDUCATION:

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

EMPLOYMENT:

- (1) William Fairfield Warren Distinguished Professor, Boston University, 2011-present.
 - Lorentz Professor, University of Leiden, Spring, 2013.
 - Affiliate Faculty, Hariri Inst. for Computational Science & Engineering, 2013–present.
 - 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*: University of Leicester (UK), 2017.
- (1b) Doctorate *Honoris Causa*: Universidade Federal do Rio Grande do Norte (Natal, Brazil), 2016.
- (1c) Doctorate *Honoris Causa*: Universidade Federal de Ceará (Fortaleza, Brazil), 2013.
- (1d) Doctorate *Honoris Causa*: Inst. for Advanced Studies, (Lucca, Italy), 2012.
- (1e) Doctorate *Honoris Causa*: University of Messina (Italy), 2009
- (1f) Doctorate *Honoris Causa*: Northwestern Univ. (Evanston, IL), 2009.
- (1g) Doctorate *Honoris Causa*: Univ. Wroclaw (Poland), 2004.
- (1h) Doctorate *Honoris Causa*: University of Liège (Belgium), 2001.
- (1i) Doctorate *Honoris Causa*: Univ. Dortmund (Germany), 2001.
- (1j) Doctorate *Honoris Causa*: Eötvös Loránd University (Budapest, Hungary), 1997.
- (1k) Doctorate *Honoris Causa*: Bar-Ilan University (Ramat-Gan, Israel), 1994.
- (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.
- (4) *Senior Award*, European Complex Systems Society, 2014
- (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.
- (5) *van Leeuwenhoek Lecture, Leiden*, 2014
- (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) One metric for impact is the Hirsch Index. ISI Web of Science, lists 87,685 citations of 1287 papers (excluding 33 books)—each available online at <http://polymer.bu.edu/hes/>. Of these, the PI has authored 139 papers with citation count larger than rank, so $H = 139$. Hirsch [PNAS **102**, 16569 (2005)] names only one physicist with $H > 139$. Itemized in <http://polymer.bu.edu/hes/articles/highlycited.html>. Google Scholar lists 151,516 citations, of which 174 have citation count larger than rank, so $H = 174$.
- (10) *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)].
- (11) *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 Interace 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, *Board of External 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, 2012 and 2013 “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 Found. External Evaluation Comm., 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; Tashkent, Uzbekistan, 2013).
- (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.
- (21g) Co-Editor of Cambridge University Press book series *Physics of Society—Econophysics & Sociophysics*, 2015 – present.
- (21h) 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 (over 1200) may be downloaded as pdf files from <http://polymer.bu.edu/hes/articles/>

PUBLICATIONS: See <http://polymer.bu.edu/hes/articles/>

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:** 7033 (3684 cited correctly, 1434 cited as Eugene Stanley, 1242 with the year of the reprint, 1978, 167 with year of paperback, and 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. Third Edition (with A. Lesne): 2017.** 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:** 4415 Google Scholar, 3066 ISI WoS.
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 (Economist-sha, 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:** 3408.
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: rencontre internationale nouvelles frontieres 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). **Citations**: 249
 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. D. Matrasulov and H. E. Stanley [eds], *Nonlinear Phenomena in Complex Systems: From Nano to Macro Scale*, Proceedings of NATO Advanced Research Workshop, Tashkent, Uzbekistan, May 2013 (Springer, Dordrecht, 2014).
 33. 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, 2016).

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:** 380
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:** 184

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1375. D. Corradini, P. Gallo, H. E. Stanley and S. V. Buldyrev, “Interplay between Liquid-Liquid Transition and Phase Segregation of Hard Spheres Solutes” (preprint).
1376. I. Vodenska, A. Joseph, H. E. Stanley, and G. Chen, “Novel Forecasting Techniques Using Big Data, Network Science, and Economics” (preprint).
1377. B. Podobnik, A. Valentini, and H. E. Stanley, “Scale-Free Preferential Attachment Process with Random Noise: Application to Credit Risk” (preprint).
1378. S. Leahy, S. Levy-Carciente, H. E. Stanley, and D. Y. Kenett, “Correlation Analysis of the Brazilian Stock Market” (preprint).
1379. Q. Li, L. A. Braunstein, S. Havlin, and H. E. Stanley, “Susceptible-Infected-Susceptible Model on Interdependent Networks” NATHUMBEHAV-16070329 (preprint).
1380. V. Dalko, L. R. Klein, C. Curme, D. Y. Kenett, H. E. Stanley, and M. H. Wang, “Income Inequality and Information Monopoly in Financial Markets” (preprint).
1381. H. H. A. Rêgo, L. A. Braunstein, and H. E. Stanley, “Percolation-Like Complexity in a Two-Dimensional Off-Lattice Model” (preprint).
1382. A. Tareen, D. Y. Kenett, H. E. Stanley, and S. Havlin, “Communities of Kuramoto Oscillators as a Proxy for Shock Propagation in Real Networks” (preprint).
1383. K. Jaffe, S. Levy-Carciente, D. Y. Kenett, S. Havlin, and H. E. Stanley, “Exploring Synchronies between Technological, Commercial, Capital, and Scientific Network Dynamics” (preprint).
1384. A. Majdandzic, L. A. Braunstein, C. Curme, I. Vodenska, S. Levy-Carciente, H. E. Stanley, and S. Havlin, “Multiple Tipping Points and Optimal Repairing in Interacting Networks” (preprint).
1385. H. H. A. Rêgo, G. Z. dos Santos Lima, H. E. Stanley, and L. A. Braunstein, “Epidemic Spreading in a Two-Dimensional Long-Range SIR Model” (preprint).
1386. T. Takaishi, Z. Zheng, and H. E. Stanley, “Dynamical Analysis of Cross Correlations and Systemic Risk in the Japanese Stock Market” (preprint).

1387. B. Podobnik, D. Horvatic, M. Popovic, J. M. Buldu, and H. E. Stanley, “Relationship between Feedback Mechanism and Resilience Dynamics in Dynamic Competing Networks” (preprint).
1388. N. Dehmamy, S. V. Buldyrev, S. Havlin, H. E. Stanley, and I. Vodenska, “A Systemic Stress Test Model in Bank-Asset Networks” (preprint).
1389. A. Majdandzic, L. A. Braunstein, C. Curme, I. Vodenska, S. Levy-Carciente, S. Havlin, and H. E. Stanley, “Multi-Stability in Interdependent Dynamical Networks with Recovery” (preprint).
1390. C. Cramer, L. Sheetz, H. Sayama, P. Trunfio, H. E. Stanley, and S. Uzzo, “NetSci High: Bringing Network Science Research to High Schools” (preprint).
1391. H. H. Aragão Rêgo, S. Miyazima, H. E. Stanley, “Is There a Temperature Difference among Various Languages? From the Zipf law to Thermo-Comparative Linguistics” (preprint).
1392. Z. Zheng, Z. Qiao, H. E. Stanley, and B. Li, “Predicting Market Instability: New Dynamics between Volume and Volatility” (preprint).
1393. H.-T. Zhang, M.-C. Fan, Y. Wu, J. Gao, Y. Yuan, and H. E. Stanley, “Achieving Synchronization Using a Cheap Distributed Controller or Individual Memory Extension” (preprint).
1394. J. Gao, S. V. Buldyrev, H. E. Stanley, and S. Havlin, “Vulnerability of a network of networks” (preprint).
1395. A. Mullokandov, N. Dehmamy, I. Vodenska, and H. E. Stanley, “Modeling the Daily Price Dynamics of a Stock Market” (preprint).
1396. W. Wang, Q.-H. Liu, M. Tang, H. Gao, H. E. Stanley, and W. Wang, “Optimal Target Selection in Local Attacks on Complex Networks” (preprint).
1397. B. Podobnik, M. Jusup, and H. E. Stanley, “Conservation Laws as Emerging Functionality in Dynamical Networks” (preprint).
1398. G. Dong, S. Shai, R. Du, S. Shuai, L. Tian, H. E. Stanley, and S. Havlin, “Localized Attack on Modular Network” (preprint).
1399. W. Wang, M. Tang, L. A. Braunstein, and H. E. Stanley, “Emergence of Microtransition in the Dynamics of Social Contagions: The Role of Time-Delays” (preprint).
1400. L. Tang, K. Jing, J. He, and H. E. Stanley, “Supply Chain Scheduling in a Collaborative Manufacturing Mode: Model Construction and Algorithm Design” (preprint).
1401. W. Wang, M. Tang, H. E. Stanley, and L. A. Braunstein, “Social contagions on multiplex networks with communication channels alternation” (preprint).
1402. Y. N. Kenett, O. Levy, D. Y. Kenett, H. E. Stanley, M. Faust, and S. Havlin, “Flexibility of Thought in High Creative Individuals Represented by Percolation Analysis,” *Proc. Natl. Acad. Sci. USA* doi/10.1073/pnas.1717362115 (2018).
1403. T. Wu, L. Zhong, X. Li, and H. E. Stanley, “Power Iteration Ranking for Complex Networks” (preprint).
1404. Y.-J. Wang, Y.-K. Cao, C.-P. Zhu, F. Wu, M.-H. Hu, B. Barzel, and H. E. Stanley, “Universal patterns behind big data of passenger flight departure delays in United States” (preprint).
1405. R. Zhang, L. Feng, C. Monterola, B. Podobnik, H. E. Stanley, and Y. Hu, “Extreme Community Structural Risk in Interdependent Multilayer Networks” (preprint).
1406. L. Labrador, D. J. Jovanović, M. I. Marqués, K. Smits, S. D. Dolić, F. Jaque, H. E. Stanley, M. D. Dramićanin, J. García-Solé, P. H. Gonzalez, and D. Jaque, “Crossover between Water Molecular Behaviors Revealed by Interparticle Energy Transfer in Luminescent Nanofluids” (preprint).
1407. C. A. Cerdeiriña and H. E. Stanley, “Ising-like Models with Energy-Volume Coupling” (preprint).
1408. X. Chen, S. Cai, W. Wang, M. Tang, and H. E. Stanley, “Predicting the Epidemic Threshold of Correlated Networks: A Comparison of Methods,” *Physica A* (submitted).
1409. C. Corsaro, D. Mallamace, S. Vasi, S.-H. Chen, H. E. Stanley, and F. Mallamace, “Hydrophilic and Hydrophobic Competition in Water-Methanol Solutions” (submitted).
1410. W. Wang, H. E. Stanley, and L. A. Braunstein, “Effect of Time-Delays on the Dynamics of Social Contagions” (NJP-107302).
1411. C. Curme, D. Y. Kenett, R. N. Mantegna, H. E. Stanley, and M. Tumminello, “How Lead-Lag Correlations Affect the Intraday Pattern of Collective Stock Dynamics” (preprint).
1412. M. A. Di Muro, L. D. Valdez, H. H. Aragã Rêgo, S. V. Buldyrev, H. E. Stanley, and L. A. Braunstein, “Cascading Failure in a System of Two Interdependent Networks with Multiply-Connected Nodes” (preprint).

1413. W. Li, L. Zhao, J. Gu, S. Liu, S. Deng, and H. E. Stanley, “Optimal Transpot in Worldwide Metro Networks” (preprint).
1414. D. Li, J. Ma, D. Han, M. Sun, L. Tian, and H. E. Stanley, “Opinion Dynamics in Activity Driven Networks” (preprint).
1415. W. Wang, H. E. Stanley, and L. A. Braunstein, “Effects of Time Delays in the Dynamics of Social Contagions,” *New J. Phys.* **20**, 013034 (2018).
1416. S. Wang, H. E. Stanley, and J. Gao, “A methodological framework for vulnerability analysis of interdependent infrastructure systems under deliberate attacks” (preprint).
1417. W. Li, L. Zhao, J. Gu, S. Liu, S. Deng, and H. E. Stanley, “Optimal Transport in Worldwide Metro Networks” (preprint).
1418. X. Wu, R. Gu, Y. Ji, and H. E. Stanley, “Dynamic Behavior Analysis of Internet Flows under Cascading Failures” (preprint).
1419. Y. Cui, M. Cai, and H. E. Stanley, “Discovering Disease-Associated Genes in Weighted Protein-Protein Interaction Networks” (preprint).
1420. S. Begušić, Z. Kostanjčar, B. Podobnik, and H. E. Stanley, “Information Theoretic Measure of Nonlinear Dependences in Currency and Cryptocurrency Markets” (preprint).
1421. G.-J. Wang, C. Xie, L. Zhao, Z.-Q. Jiang, and H. E. Stanley, “Volatility Connectedness in the Chinese Banking System: Do State-Owned Commercial Banks Contribute More?” (preprint).
1422. M. Wollchläger, A. P. Becker, I. Vodenska, H. E. Stanley, and R. Schäfer, “Economic and Political Effects on Currency Clustering Dynamics” (preprint).
1423. X. Zhu, W. Wang, S. Cai, and H. E. Stanley, “Dynamics of Social Contagions with Local Trend Imitation” (preprint).
1424. N. C. Frey, S. Matin, H. E. Stanley, and M. Salinger, “Universal Fluctuations in Growth Dynamics of Economics” (preprint).
1425. H.-T. Zhang, M.-C. Fan, Y. Wu, J. Gao, H. E. Stanley, T. Zhou, and Y. Yuan, “Ultrafast Synchronization via Local Observation” (preprint).
1426. W. Wang, X.-L. Chen, L.-F. Zhong, and H. E. Stanley, “Social Contagions with Heterogeneous Credibility” (preprint).
1427. P. Kumar and H. E. Stanley, “Boson peak, Ioffe-Regel Crossover, and Liquid-Liquid Phase Transition in Supercooled Water” (preprint).
1428. A. Loppini and H. E. Stanley, “Anticipating Critical Transitions in Heterogeneous Networks: Looking at Leaves” (preprint).
1429. J. Chen, L. Chen, Y. Liu, Y. Yuan, Y. Wang, X. Li, and H. E. Stanley, “Surname Distribution and Its Spatial Pattern in China” (preprint).
1430. H.-T. Zhang, M.-C. Fan, Y. Wu, J. Gao, H. E. Stanley, T. Zhou, and Y. Yuan, “Ultrafast Synchronization via Local Observation” (preprint).
1431. M. Wang, R. Du, G. Dong, L. Zhao, L. Tian, and H. E. Stanley, “Exact Results of the Limited Penetrable Horizontal Visibility Graph Associated to a Random Time Series and Its Application” (preprint).
1432. L. Zhao, G.-J. Wang, M. Wang, W. Li, and H. E. Stanley, “Stock Markets as Temporal Networks” (preprint).
1433. X. Li, Y. Wang, and H. E. Stanley, “The Role of Credit Expansion and Debt Circulation in Economic Growth” (preprint).
1434. W. Wang, S. Yang, F. Hu, H. E. Stanley, S. He, and M. Shi, “An Approach for Cascading Effects within Critical Infrastructure Systems” (preprint).
1435. S. V. Buldyrev, F. Mortazavi, D. L. Rosene, H. E. Stanley, and V. J. Wedeen, “Can the Time Dependence of Diffusion MRI Unravel the Structure of White Matter on a Subvoxel Scale?” (preprint).
1436. H. Yang, D. Fu, B. Podobnik, Z. Zheng, and H. E. Stanley, “Content or Media, Which is More Important in the Message Dissemination Process?” (preprint).
1437. Z. Su, W. Wang, L. Li, J. Xiao, and H. E. Stanley, “Optimal Community Structure for Social Contagions” *New Journal of Physics* (submitted).
1438. M. Wang, A. L. M. Vilela, R. Du, L. Zhao, G. Dong, L. Tian, and H. E. Stanley, “Theoretical Results on the Topological Properties of the Limited Penetrable Horizontal Visibility Graph Family” (preprint).

1439. A. Flori, F. Pammolli, S. V. Buldyrev, L. Regis, and H. E. Stanley, “Communities of Experts: Finding Commonalities in the Behavior of Investment Managers” (preprint).
1440. S. Begušić, Z. Kostanjčar, H. E. Stanley, and B. Podobnik, “Scaling of the Distribution of Bitcoin Returns” (preprint).
1441. Y. Wu, X.-P. Xian, L.-F. Zhong, X. Xiong, and H. E. Stanley, “Power Iteration Ranking via Hybrid Diffusion for Vital Node Identification” (preprint).
1442. S. Begušić, Z. Kostanjčar, D. Kovač, H. E. Stanley, and B. Podobnik, “Feedback in Asset Dependency Networks as a Measure of Systemic Risk” (preprint).
1443. Y.-C. Gao, H.-L. Tang, S.-M. Cai, and H. E. Stanley, “The Impact of Margin Trading on Share Price Evolution: A Cascading Failure Model Investigation” (preprint).
1444. A. L. M. Vilela and H. E. Stanley, “Effect of Strong Opinions in Majority-Vote Model Dynamics” (preprint).
1445. L. Chen, Z. L. Qiao, B. X. Li, and H. E. Stanley, “Selection and Combination of Multiple Cost Drivers in Implementing Activity-Based Costing System” (preprint).
1446. M. Wang, L. Zhao, R. Du, C. Wang, L. Chen, and H. E. Stanley, “A Novel Hybrid Method of Forecasting Crude Oil Prices Using Complex Network Science and Artificial Intelligence Algorithms” (preprint).
1447. R. J. Zhang, H. E. Stanley, and F. Y. Ye, “Extracting h-Backbone as a Core Structure in Weighted Networks” (preprint).
1448. S. Nie, H. E. Stanley, S.-M. Chen, B.-H. Wang, and Z.-W. Wang, “Control Energy of Complex Networks towards Distinct States” (preprint).
1449. S. Wang, S. Nie, L. Zhao, and H. E. Stanley, “Analyzing Urban Subway Network Robustness Using Multiple Perspectives” (preprint).

XVI. ARTICLES BASED ON RESEARCH IN SCIENCE/MATH EDUCATION

1373. H. E. Stanley, “Learning Concepts of Fractals & Probability by ‘Doing Science’” *Physica D* **38**, 330–340 (1989).
1374. B. Ostrovsky, P. H. Poole, F. Sciortino, H. E. Stanley, and P. A. Trunfio, “Learning Science through Guided Discovery: Liquid Water and Molecular Networks” in *Festschrift for Michael E. Fisher*, eds. E. Domany and D. Jasnow, *Physica A* **177**, 281–293 (1991).
1375. U. Essmann, S. Glotzer, M. Gyure, B. Ostrovsky, P. H. Poole, S. Schwarzer, R. Selinger, L. S. Shore, H. E. Stanley, E. F. Taylor, and P. A. Trunfio, “Learning Science Through Guided Discovery: Liquid Water & Molecular Networks” in *From Phase Transitions to Chaos*, edited by G. Györgyi, I. Kondor, L. Sasvári, and T. Tél (World Scientific, Singapore, 1992), pp. 249–269.
1376. S. V. Buldyrev, P. Garik, S. Glotzer, G. Huber, T. Mekonen, R. Selinger, M. H. Shann, L. S. Shore, H. E. Stanley, D. Stauffer, E. F. Taylor, and P. A. Trunfio, *Das zufällige Universum: forschendes Lernen für Wahrscheinlichkeit und Fraktale* (Glatt Publishing Co., Frankfurt, Germany, 1993).
1377. L. S. Shore, M. J. Erickson, P. Garik, P. Hickman, H. E. Stanley, E. F. Taylor and P. A. Trunfio, “Learning Fractals by ‘Doing Science’: Applying Cognitive Apprenticeship Strategies to Curriculum Design and Instruction” *Interactive Learning Environments* **2**, 205–226 (1993).
1378. S. V. Buldyrev, M. J. Erickson, P. Garik, L. S. Shore, H. E. Stanley, E. F. Taylor, P. A. Trunfio, and P. Hickman, “Science Research in the Classroom” *The Physics Teacher* **32**, 411–415 (1995).
1379. E. F. Taylor, S. V. Buldyrev, P. Garik, H. E. Stanley and P. Trunfio, “Science Research Models Used by High School Students: Comparison of Two Cases” *Interactive Learning Environments* **4**, 258–270 (1994).
1380. P. Garik, H. E. Stanley, E. Taylor and P. Trunfio, “Current Science Research in the High School Science Classroom” *APS News* **4**, 8 (1995).

XVII. NATURE “NEWS & VIEWS”

1381. H. E. Stanley, “Power Laws and Universality” *Nature* **378**, 554 (1995).
1382. H. E. Stanley, “Non-Equilibrium Physics: Freezing by Heating” *Nature (News and Views)* **404**, 718–719 (2000).
1383. H. E. Stanley and S. V. Buldyrev, “The Salesman and the Tourist” *Nature (News and Views)* **413**, 373–374 (2001).
1384. P. F. McMillan and H. E. Stanley, “Going Supercritical,” *Nature Physics* **6**, 479–480 (2010).

XVIII. SELECTED BOOK REVIEWS

1385. D. L. Goodstein, *States of Matter* [in *Physics Today* **29**, No. 6, p. 51–52 (June 1976)].
1386. S. Ma, *Statistical Mechanics* [in *Physics Today*, **41**, No. 6, p. 76–78 (June 1988)].
1387. A. Yu. Grosberg and A. R. Khokhlov, *Statistical Physics of Macromolecules* [in *Computers in Physics* **9**, 171 (1995)].
1388. J. B. Bassingthwaighe, L. S. Liebovitch, and B. J. West, *Fractal Physiology* (Oxford University Press, New York, 1994) [in *Physics Today* **48**[12], 66 (1995).]
1389. F. Capra *The Web of Life: A New Synthesis of Mind and Matter* (Harper Collins, London, 1996) [in *New Scientist* **152** [No. 2059] 46–47 (7 Dec 1996)].
1390. B.J. West and B. Deering, *The Lure of Modern Science* (World Scientific, Singapore, 1995) [in *J. Stat. Phys.* **86**, 443–444 (1997)].
1391. U. Frisch, *Turbulence: The Legacy of A.N.Kolmogorov* (Cambridge, 1996) [in *J. Stat. Phys.* **88**, 521–523 (1997)].
1392. H. E. Stanley, “Silicon Surrogates of the Real World”, a review of J. L. Casti, *Would-Be Worlds: How Simulation is Changing the Frontiers of Science* (John Wiley & Sons, New York, 1997) [in *Physics World* **10**, [No. 6] 52–53 (June 1997)].
1393. H. A. Makse, H. E. Stanley and S. Havlin, “Power Laws for Cities”, *Physics World* **10**, [10] 22–23 (October 1997)
1394. H. E. Stanley, “The Chaotic Psyche”, a review of *Nonlinear Dynamics, Psychology, and Life Sciences*, S. J. Guastello, editor. *Nature* **395**, 130 (1998).
1395. H. E. Stanley, “Complex issues in a specialist field”, a review of *Advances in Complex Systems*, E. Bonabeau, editor. *Nature* **401**, 12 (1999).
1396. H. E. Stanley, Book Review: M. Lax, W. Cai, and M. Xu, *Random Processes in Physics and Finance*, *Physics Today* **61**[1], 63–64 (2008).
1397. H. E. Stanley, Book Review: Y. Aoyama, Y. Fujiwara, Y. Ikeda, H. Iyetomi, and W. Souma, *Econophysics and Companies: Statistical Life and Death in Complex Business Networks*, *J. Stat. Phys.* **145**, 204–205 (2011).
1398. H. E. Stanley, Book Review: B. J. West and P. Grigolini, *Complex Webs: Anticipating the Improbable*, *Physics Today* **64**[11], 58–60 (2011).

114 Ph.D. THESES SUPERVISED [of whom 20 are women]

- (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. Elias, 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. Elected 2014: National Academy of 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.
- (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*: full Professor, Univ Milano. Elected to Fellowship, APS (Am. Phys. Soc.) 2016.
- (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: Rensaleer Polytechnic Institute (RPI). Effective 2015: Humana (a health insurance company)
- (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. Co-advisor Lidia Braunstein. “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: Northeastern University
- (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: Tenured Associate 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.
- (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”. Assistant Professor, Univ. California, Merced, CA
- (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 Jiao Tong University April 2012 (jointly with S. Havlin and Xiaoming Xu in Shanghai Jiao Tong University) Present Address: Asst. Professor of Physics, RPI
- (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, “Critical Phenomena of Anomalous Liquids,” 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) Present Address: National University of Singapore

- (98) Di Zhou, Physics Department, Boston University, “Interdependent Networks: Its Topological Percolation Research and Application in Finance,” May 2014. Present Address: Bloomberg, NYC.
- (99) Qian Li, Physics Department, Boston University, “Social Models on Complex Networks and Econophysics,” May 2014 Present Address: Bloomberg, NYC.
- (100) Erik Lascaris, Physics Department, Boston University, December 2014 “Liquid-Liquid Phase Transitions and Water-like Anomalies in Liquids”, Present Address: Boston Univ. Physics Dept
- (101) Will Morrison, Physics Department, Boston University, “Understanding the Brain through Its Spatial Structure,” December 2014 Present Address: Ab Initio, Boston MA
- (102) Chester Curme, Physics Department, Boston University, “Statistically Validated Networks,” April 2015 Present Address: Quantitative Analyst at Loomis, Sayles and Company.
- (103) Duan Wang, Physics Department, Boston University, “Application of Statistical Physics in Time Series Analysis,” Apr 2015
- (104) Shuai Shao, Physics Department, Boston University “Robustness and Structure of Complex Networks”, Jun 2015 present address: Data Scientist Fellow at Insight Data Science
- (105) Nima Dehmamy, Physics Department, Boston University Present Address: Center for Network Research, Northeastern University (advisor Prof. A.L.Barabasi)
- (106) Antonio Majdandzić, Physics Department, Boston University, March 2016. “Recovery Processes and Dynamics in Single and Interdependent Networks’ Present Address: Nomura Corp.
- (107) Joao Ricardo dos Santos, Physics Department, Boston University, 2017.
- (108) Adam Avakian, Physics Department, Boston University, 2017
- (109) Xin Yuan, Physics Department, Boston University, 2017
- (110) Nagendra Panduranga, Physics Department, Boston University (2017). Ph.D. exam 31 July 2017
- (111) Asher Mullokandov, Physics Department, Boston University (2017).
- (112) Alexander Becker, Physics Department, Boston University (expected).
- (114) Xiangyi Meng.
- (115) Bernardo Zubillago

240 “RESEARCH ASSOCIATES” and “VISITING SCIENTISTS” [of whom 51 are women]

- (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. Physics Department, Univ. of Rostov on Don, Russia. **Presently:** Deceased
- (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 **Presently:** Univ. Federal de Alagoas, Maceió, 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. Deceased.
- (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, Northwestern University.
- (67) Paul Trunfio **Presently:** Boston University
- (68) Arieh Ben-Naim **Presently:** Hebrew University, Jerusalem, Israel
- (69) Thadeu Penna **Presently:** University of Niteroi, Niteroi, Brazil
- (70) Brigita Kutnjak-Urbanc **Presently:** Assoc. Professor of Physics, Drexel University
- (71) Youngki Lee **Presently:** Univ. Hunan, Hunan, China
- (72) Marc Barthelemy **Presently:** CEA Saclay, Paris
- (73) Dietrich Wolf **Presently:** Univ. Duisberg, Germany
- (74) Pedro Bernaola **Presently:** Professor of Physics, Univ. Malaga, Malaga, Spain
- (75) Giancarlo Franzese **Presently:** Professor, Univ. of Barcelona

- (76) Alessandro Chessa **Presently:** Professor of Physics, Univ. Sardegna, Calabria, Italy
- (77) Bernd Rosenow **Presently:** Asst Professor of Physics, Univ. Kln, Köln, Germany
- (78) Marcia Barbosa **Presently:** Professor of Physics, Univ. Rio Grande da Sul, Porto Alegre, Brazil
- (79) Verena Frohling **Presently:** Univ. Freiburg, Germany
- (80) Boris Podobnik **Presently:** Professor of Physics, Univ. of Zagreb, Zagreb, Croatia
- (81) Francisco Sales **Presently:** Univ. Rio Grand de Norte, Natal, Brazil
- (82) Yossi Ashkenazy **Presently:** Prof., Ben-Gurion University, Israel
- (83) Adriano Alencar **Presently:** University of Sao Paolo, Brazil
- (84) Claire Wyart **Presently:** University of California, Berkeley
- (85) Stefano Mossa **Presently:** University of Paris VI, Jussieu
- (86) Masaki Hoshiyama **Presently:** Univ Tokyo
- (87) Lidia Braunstein **Presently:** University of Mar del Plata, Mar del Plata, Argentina
- (88) Telesforo López-Ciudad **Presently:** Univ of Madrid, Madrid, Spain
- (89) Manuel Marques **Presently:** Univ of Madrid, Madrid, Spain
- (90) André Auto-Moreira **Presently:** Univ of Sao Paolo, Brazil
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- (92) Kensuke Fukuda **Presently:** NTT Research Labs, Tokyo
- (93) Miguel de la Casa **Presently:** Univ of Madrid, Madrid, Spain
- (94) Roberto Consiglio **Presently:** Univ. Rio Grande da Sul, Porto Alegre, Brazil
- (95) Jan W. Kantelhardt **Presently:** Univ of Giessen, Giessen, Germany
- (96) Francisco de los Santos Fernández **Presently:** Univ of Granada, Spain
- (97) Sergey V. Buldyrev **Presently:** Professor of Physics and Chair, Physics Dept., Yeshiva Univ., NY.
- (98) Plamen Ivanov **Presently:** Research Professor of Physics, Boston University
- (99) Luis Cruz-Cruz **Presently:** Assoc. Professor of Physics, Drexel University
- (100) Paulo Netz **Presently:** Univ. Rio Grande da Sul, Porto Alegre, Brazil
- (101) Gerald Paul – Retired.
- (102) Toshihiro Tanizawa, **Presently:** Kochi University
- (103) Kazuko Yamasaki **Presently:** Tokyo University of Information Science
- (104) Jan Nagler **Presently:** Computational & Theoretical Physics @ ETH Zurich
- (105) Philipp Weber
- (106) Takashi Shimada **Presently:** Univ Tokyo
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- (108) Woo-Sung Jung. **Presently:** Pohang Univ. Science and Technology (POSTECH), Republic of Korea
- (109) Daniel T. Schmitt
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- (112) Moo-Young Choi **Presently:** Seoul National University
- (113) Jiann-Shing Shieh **Presently:** Graduate School of Biotechnology and Bioengineering, Yuan Ze Univ.
- (114) Joon-Young Moon. **Presently:** Nonlinear & Complex Systems Lab. POSTECH, Pohang, Korea
- (115) Pandelis Perakakis
- (116) Wenqi Duan **Presently:** Peking University
- (117) Tobias Preis **Presently:** University of Warwick
- (118) Fengzhong Wang
- (119) Jiping Huang **Presently:** Bloomberg
- (120) Laurent Seuront **Presently:** CNRS Oceanography, Wimereux, France
- (121) Sadha Moodley
- (122) Eudenilson Albuquerque **Presently:** Univ. Rio Grande del Norte, Natal, Brazil
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- (124) Massimo Riccaboni **Presently:** IMT Lucca
- (125) Mario Bertella **Presently:** University of San Paolo
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- (127) Dario Corradini **Presently:** University of Paris
- (128) Jonathas Silva

- (129) Helen Susannah Moat **Presently:** University of Warwick
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- (131) Rujin Du **Presently:** Jiangsu University
- (132) Zhiqiang Jiang
- (133) Huijuan Wang **Presently:** TU Delft
- (134) Dror Y. Kenett **Presently:** Office of Financial Research (OFR), Washington DC
- (135) J. S. Andrade Jr **Presently:** University of Ceara, Fortaleza, Brazil
- (136) Xin (Siva) Zhang **Presently:** Shanghai University
- (137) Wen Fang **Presently:** Beijing Jaotong University
- (138) Mei-Chu (“Maggie”) Chang
- (139) Chang-Shuai Li
- (140) Xiaojun Zhao
- (141) Simone Mainardi
- (142) Paolo Sgrignoli
- (143) Tolga Ulusoy
- (144) Jean Wu
- (145) Henio Aragao
- (146) Carles Calero **Presently:** University of Barcelona
- (147) Xiaobing Feng
- (148) Sary Levy-Carciente, Fulbright Fellow **Presently:** Professor of Economics, Caracas
- (149) Qianming Zhang
- (150) Ying-Hui Shao
- (151) Youzhao Gou
- (152) Linyuan Lu **Presently:** Professor, Hangzhou University
- (153) Gao Li
- (154) Gang-Sun
- (155) Zhen Su
- (156) Wenjie Jia
- (157) Tomislav Lipic
- (158) Qiang Li
- (159) Xueming Liu
- (160) Shinan Cao
- (161) Yinan Jiang
- (162) Zhen Su, Beijing Univ of Post & Communications
- (163) Chuang Liu, Hangzhou Normal University
- (164) Liang Eric Tang
- (165) Yong Tao
- (166) Gangg-Jin (“Larry”) Wang
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- (186) Yu-Lei Wan
- (187) Yachun Gao
- (188) Yunfan Lu
- (189) Jun Wu
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- (192) Dandan Li
- (193) Meng Cai
- (194) Jian Gao
- (195) Weiping Wang
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- (199) Qin Zhao
- (200) Huanmei Qin
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- (202) Wenyi Fang
- (203) Zhaojuan Meng
- (204) Quantong Guo
- (205) Chen Jiawei
- (206) Yang Li
- (207) Tomasz Gubiec
- (208) Marko Jusup
- (209) Antonio Scala
- (210) Roberto Lobo
- (211) Walter Quattrociocchi
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- (221) Shuliang Wang
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- (224) Minggang Wang
- (225) Rui-Qi Han
- (226) Xiangxiang Zeng
- (227) Andre Da Mota Viela
- (228) Shuiping Shi
- (228) Chao Wang
- (229) Yu Ding
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- (232) Yongbin Shi

- (233) Yanqing Ye
- (234) Xiaowen Zhang
- (235) Yanli Xu
- (236) Wenjing Ruan
- (237) Long Him Cheung
- (238) Shaomin Shu
- (239) Huanmei Qin
- (240) Xiaoyun Xing