

Biographical Sketch: Linda Elizabeth Reichl

(a) Professional Preparation

Graduate Degrees: University of Denver, Physics: MS (1966), Ph.D. (1969).

Postdoctoral Institutions: University of Texas at Austin, Physics (1969-1971)
Brussels Free University, Physics (1971-1973).

(b) Appointments

1. Professor of Physics, University of Texas at Austin, September 1988 to present
2. Acting Director of the Center for Statistical Mechanics, University of Texas at Austin, September 1974 to 2003.
3. Director of the Center for Complex Quantum Systems, 2003 to the present.
4. Associate Dean for Academic Affairs, The College of Natural Sciences, 2006-2010.
3. U.S. Editor of the nonlinear science journal "Chaos, Solitons and Fractals", August 1997 to 2006.
4. Elected Fellow of the American Physical Society for "original work in the field of quantum chaos" November 2000.
5. Recipient of a Japanese Society for the Promotion of Science Research Fellowship, March 13-April 9, 1994.
6. Project Specialist, Chinese Universities Development Project, sponsored by the World Bank, May 20, 1991 to June 26, 1991.
7. Associate Professor of Physics, University of Texas at Austin, September 1980 to August 1988.
8. Visiting Research Scientist, Institute for Nonlinear Science, University of California, San Diego, August 1987 to January 1988.
9. Assistant Professor of Physics, University of Texas, September 1973 to August 1980.
10. European Atomic Energy Commission Research Scholar to Belgium, August to December 1977.
11. Fulbright-Hays Research Scholar to Belgium, October 1971 to June 1973.
12. N.S.F. Faculty Associate, University of Texas at Austin, 1969 to 1971.

(c) Publications

Linda Reichl has more than 145 publications in peer reviewed journals. Below the first five publications are closely related to the project and the second five are partially to the project:

1. B. P. Holder and Linda E. Reichl, "Avoided Crossings in Driven Systems," *Phys. Rev. A* **72** 043408 (2005).
2. B. P. Holder and L. E. Reichl, "Stimulated-Raman-adiabatic passage-like transitions in a harmonically modulated optical lattice," *Phys. Rev. A* **76** 013420 (2007).
3. D.F. Martinez, L.E. Reichl, and G.A. Luna-Acosta, "Quasienergy band structure of the harmonically driven δ -function chain," *Phys. Rev. B* **66** 174306 (2002).
4. Wenjun Li and L.E. Reichl, "Transport in Strongly Driven Heterostructures and Bound-state-induced Dynamics Processes," *Phys. Rev. B* **62** 8269 (2000).
5. Anabha Roy and L.E. Reichl, "Coherent control of trapped bosons," *Phys. Rev. A* **77** 033418 (2008).
6. Kyungsun Na and L.E. Reichl, "Chaos assisted adiabatic passage," *Phys. Rev. A* **70** 63405 (2004).
7. W. Li and L. E. Reichl, "*Floquet scattering through a time-periodic potential*", *Phys. Rev. B* **60**, 15732-15741 (1999).

8. Analahba Roy and L.E. Reichl, "Quantum control of interacting bosons in a periodic optical lattice," *Physica E* 42 1627 (2010).
9. Hoshik Lee and L.E. Reichl, "Scattering echoes in a waveguide with a ripple cavity," *Phys. Rev. B* 73 195315 (2006).
10. Hoshik Lee and L.E. Reichl, "Dicke effect in a multi-ripple waveguide," *Phys. Rev. B* 77 205318 (2008).

(d) Synergistic Activities

- (d.1) The PI has written a graduate textbook on statistical physics that is used internationally. The third edition, which appeared recently, is L.E. Reichl, *A Modern Course in Statistical Physics, 3rd Edition* (Wiley-VCH, Weinheim, 2009) ISBN 978-3-527-40782-8. It has appeared in Chinese and Japanese translations. She has also written a monograph in conservative classical and quantum chaos that is used internationally, both as a research resource and as a textbook. The latest edition is L.E. Reichl, *The Transition to Chaos, 2nd Edition* (Springer, New York, 2004) ISBN 0-387-97788-6. This book has appeared in Russian translation.
- (d.2) The PI runs an undergraduate teaching lab and has written the lab's manual and she teaches physics classes at both the graduate and undergraduate levels.
- (d.3) The PI has sponsored numerous activities focused on improving the retention rate of women in physics and other science disciplines. Once a year, for the past twelve years, she has co-taught a class called "Women in Science" that is designed to offer support to women students pursuing a career in science. There are two versions of this course, one aimed at freshman women and the other aimed at women graduate students.
- (d.4) The PI has been co-organizer of numerous conferences devoted to topics in nonlinear dynamics and nanoscience. Three of the more recent include:
 - "Quantum Chaos- Theory and Applications," Held at Cocoyoc, Mexico July 8-13, 2001. The PI was conference Chairperson.
 - "Mechanisms for Decoherence - Theory and Applications to Nanotechnology and Quantum Information Science," that was held at U.T. Austin, October 26 and 27, 2001.
 - "Dynamical Chaos in Classical and Quantum Physics," held at Budker Institute of Nuclear Physics, Novosibirsk, Russia, August 4-9, 2003.

(e) Collaborators and Other Affiliations

- (e.1) Collaborators within the past 48 months:
Han Hsu, Hoshik Lee, Benjamin Holder, Michael Snyder, Tianyi Yang, Anil Shaji, Professor Christof Jung, Kyungsun Na, Analahba Roy, Hallil Saka, Roger Bengtson, Alex Barr, Erich Gust, Jin-Wook Jung
- (e.2) Ph.D. Advisor of L.E. Reichl was E.R. Tuttle, University of Denver. The principle postdoctoral advisor was Ilya Prigogine (now deceased).
- (e.3) Graduate students advised during the past five years:
Completed Ph.D.- Michael Snyder, Alex Barr, Erich Gust, Han Hsu, Hoshik Lee, Benjamin Holder, Analahba Roy, Jin-Wook Jung.
- (e.4) Total number of Ph.D. students graduated as of 9/2011: 33
- (e.5) Total number of postdoctoral scholars sponsored: 13.