

Curriculum Vitae
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DATE AND PLACE OF BIRTH: February 21, 1950; Buenos Aires, Argentina

MARITAL STATUS: Married, three children.

ACADEMIC DEGREES:

Licenciado en Física, Universidad de Buenos Aires, Argentina (1973)
Ph. D., Physics, Stanford University (1979)
Thesis Title: Phase Transitions in Lattice Gauge Theories (Advisor: Prof. L. Susskind)

EMPLOYMENT HISTORY:

Postdoctoral Research Associate, University of California, Santa Cruz (1979)
Postdoctoral Research Associate, University of Illinois (1979-80)
Research Assistant Professor, University of Illinois (1980-1981)
Assistant Professor of Physics, University of Illinois (1981-1984)
Associate Professor of Physics, University of Illinois (1984-1989)
Professor of Physics, University of Illinois (since Fall 1989)

VISITING POSITIONS:

1. Visiting Scientist, Institute for Theoretical Physics, University of California, Santa Barbara CA (USA)(Summer, 1980).
2. Consultant at IBM Thomas J. Watson Research Center (Fall 1980).
3. Visiting Scientist, Institute for Theoretical Physics, University of California, Santa Barbara CA (USA)(Summer 1981).
4. Invited Lecturer, École d'Été de Physique Théorique, Les Houches, France (Summer 1982).
5. Visiting Scientist, Commissariat a l'Énergie Atomique, Service de Physique Theorique, Saclay, France (Fall 1982).
6. Visiting Professor, Ecole Normale Supérieure, Laboratoire de Physique Theorique, Paris, France (Winter 1983).
7. Visiting Professor, Departamento de Física, Universidad de La Plata, Argentina (Summer 1984)

8. Visiting Scientist, Institute for Theoretical Physics, University of California, Santa Barbara CA (USA) (Summer 1985).
9. Visiting Professor, Departamento de Física, Universidad de La Plata, Argentina (1986-87).
10. Visiting Professor, Departamento de Física, Universidad de La Plata, Argentina (Summer 1995).
11. Visiting Professor, Departamento de Física, Universidad de La Plata, Argentina (Summer 1998).
12. External Oponent, Institute of Theoretical Physics, Chalmers University of Technology, Göteborg, Sweden (Summer 1995).
13. Visiting Scientist, Institute for Theoretical Physics, University of California, Santa Barbara (Spring and Summer 1997).
14. Visiting Scientist, Institute for Theoretical Physics, University of California, Santa Barbara CA (USA) (August-September 1998).
15. Visiting Scientist, Institute for Theoretical Physics, University of California, Santa Barbara (Spring and Summer 2006).
16. Visiting Professor, Laboratoire de Physique Théorique et Hautes Energies, Université Pierre et Marie Curie (Paris VI) et Denis Diderot (Paris VII), Paris, France (November 1998).
17. Visiting Scientist at the Program on Frontiers in Quantum Computation at the Princeton Center for Theoretical Physics, February 2008.
18. Visiting Professor, Department of Physics, Faculty of Exact and Natural Sciences, University of Buenos Aires, Argentina, December 2006.
19. Visiting Professor, Department of Physics, Stanford University, October 15-December 15, 2007.
20. Program Organizer and Visiting Scientist, Kavli Institute for Theoretical Physics, University of California Santa Barbara, Santa Barbara, CA 93106 (Summer 2009).

AWARDS:

1. John Simon Guggenheim Memorial Foundation Fellowship Award, 1998/1999.
2. Arnold O. Beckman Associate, Center for Advanced Study, University of Illinois (1990-91)
3. Arnold O. Beckman Research Award, Research Board, University of Illinois, Academic year 2006.
4. César Milstein Fellowship, SECYT, Argentina, August 2007.
5. Fellow of the American Physical Society.
6. Member, American Physical Society
7. Member, Asociación Física Argentina (Argentine Physical Association)
8. Fellow of the American Academy of Arts and Sciences
9. Organizer of the University of Chicago/University of Illinois, Joint Physics Meeting (1981-1989)

RESEARCH INTERESTS:

Condensed Matter Theory, Strongly Correlated Systems, Quantum Hall Systems, Topological Phases and Topological Field Theories, Disordered Systems, Quantum Field theory.

DOCTORAL STUDENTS:

1. Dr. Michael Ma (Prof. W. McMillan codirector), PhD University of Illinois at Urbana-Champaign, July 1982. Dr. Ma is currently Professor of Physics at the University of Cincinnati, Cincinnati OH (USA).
2. Dr. Franco Nori, PhD University of Illinois at Urbana-Champaign, July 1987. Dr. Nori is currently an Associate Professor of Physics at the University of Michigan, Ann Arbor MI (USA).
3. Dr. Avinash Singh, PhD University of Illinois at Urbana-Champaign, January 1988. Dr. Singh is currently at the Indian Institute of Technology in Kanpur, India.
4. Dr. David Withoff, PhD University of Illinois at Urbana-Champaign, July 1988. Dr. Withoff is presently a member of the staff of Wolfram Research, Champaign IL (USA).

5. Dr. Cecilia von Reichenbach; PhD Universidad de La Plata (La Plata, Argentina) July 1988. Dr. von Reichenbach is currently a Professor of Physics at Universidad de La Plata, Argentina.
6. Dr. Joel Cannon; PhD University of Illinois at Urbana-Champaign, July 1989. Dr. Cannon is currently Professor of Physics at Washington and Jefferson College, Washington PA (USA).
7. Dr. Christopher Mudry, PhD University of Illinois at Urbana-Champaign, July 1994. Dr. Mudry is currently a permanent member of the staff of the Paul Scherrer Institute at Villigen, Switzerland.
8. Dr. Ana Maria López, PhD University of Illinois at Urbana-Champaign, July 1994. Formerly a Wolfson Research Fellow at the Department of Physics at Oxford University, Oxford, England, Dr. López was a member of CONICET (Argentina) at the Instituto de Física Balseiro in S. C. de Barlioche, Río Negro, Argentina. She is currently a consultant at the London School of Economics, London (UK).
9. Dr. Antonio Castro Neto, PhD University of Illinois at Urbana-Champaign, July 1994. Dr. Castro Neto is currently a Professor of Physics at Boston University, Boston MA (USA).
10. Dr. Manuel A. Fuentes, PhD University of Illinois at Urbana-Champaign, July 1995. Dr. Fuentes was an Instructor at Oxford Brookes University, Oxford UK. He is currently a consultant on renewable energies with ITPower, London, United Kingdom.
11. Dr. Carlos Cassanello, PhD University of Illinois at Urbana-Champaign, September 1996. PDRA at the University of Köln (Germany), at the Sloan Center for Theoretical neurobiology of the University of California San Francisco, and at the Department of Physics of the University of California Berkeley. Dr. Cassanello was a Postdoctoral Research Fellow at the Center for Neurobiology and Behavior of Columbia University of California, New York City. He is currently a Postdoctoral Fellow at the Department of Psychology of the Australia National University, Canberra (Australia).
12. Dr. Nancy P. Sandler, PhD University of Illinois at Urbana-Champaign, August 1998. Dr. Sandler is currently an Assistant Professor of Physics at the University of Ohio, Athens OH.
13. Dr. Eun-Ah Kim, PhD University of Illinois at Urbana-Champaign, August 2005. Dr. Kim was a postdoctoral research associate at the Department of Physics of Stanford University, Stanford CA, from August 2005 till August 2008. Since August 2008 she is an Assistant Professor of Physics at the Department of Physics of Cornell University, Ithaca NY.
14. Dr. Michael J. Lawler, PhD University of Illinois at Urbana-Champaign, August 2006. Dr. Lawler was a postdoctoral research associate at the Department of Physics of the University of Toronto, Toronto, Ontario, Canada, from August 2006 till August 2008. He is currently an Assistant Professor of Physics at Binghamton University, Binghamton, NY.
15. Dr. Stefanos Papanikolaou, PhD University of Illinois at Urbana-Champaign, August 2008. Since August 2008 Dr. Papanikolaou is a postdoctoral research associate at the Department of Physics of Cornell University, Ithaca NY.
16. Dr. Kai Sun, PhD University of Illinois at Urbana-Champaign, May 2009. Dr. Sun will be a Postdoctoral Fellow at the Department of Physics of the University of Maryland, College Park, MD, beginning on June 2009.

MASTER STUDENTS:

1. Ms. Leticia Cugliandolo, MSc Universidad de La Plata (La Plata, Argentina) July 1989. Dr. Cugliandolo went on to earn her PhD in 1992 at the Universidad de La Plata, and is currently a Professor of Physics at the Université Pierre et Marie Curie - Paris VI, in Paris, France. She is a junior member of the Institute Universitaire de France (IUF) and the Director of the Les Houches School of Physics.

POSTDOCTORAL RESEARCH ASSOCIATES:

1. Dr. Wu-Pei Su (1983-1985, PhD university of Pennsylvania (1983)). Dr. Su is now Professor of Physics at the University of Houston, Houston TX (USA).
2. Dr. Elbio Dagotto (1985-1988), PhD Instituto Balseiro (1984). Dr. Dagotto is now a Professor of Physics at the University of Tennessee, Knoxville TN (USA), and a Group Leader at Oak Ridge National Laboratory.
3. Dr. Qian Niu (1984-1985), PhD University of Washington (1984). Dr. Niu is now Professor of Physics at the University of Texas at Austin, Austin TX (USA).

4. Dr. Adriana Moreo (1985-1988), PhD Instituto Balseiro (1985). Dr. Moreo is now a Professor of Physics at the University of Tennessee, Knoxville TN (USA), and a member of the research staff, Materials Theory Group, of Oak Ridge National Laboratory.
5. Dr. Scott Renn (1987-1988), PhD University of Pennsylvania (1987). Dr. Renn is now Assistant Professor of Physics at the University of California at San Diego, La Jolla CA (USA).
6. Dr. Shoudan Liang (1988-1990). PhD University of Chicago, Chicago IL (1985). Dr. Liang was an Assistant Professor of Physics at Penn State University. He is now a Professor at the Department of Biostatistics and Applied Mathematics of The University of Texas M.D. Anderson Cancer Center, Houston TX (USA).
7. Dr. Enrique Moreno (1988-1990), PhD Universidad de La Plata (1987). Dr. Moreno is now a visiting Associate Professor of physics at West Virginia University, Morgantown, WV (USA).
8. Dr. Vadim Kalmeyer (1989-1990), PhD Stanford University (1989). Dr. Kalmeyer was a postdoctoral associate at IBM Almaden, San Jose CA (USA). He is currently at Agilent Technologies, Santa Clara, CA.
9. Dr. Lev Ioffe (1989-1990), PhD Landau Institute for Theoretical Physics (1988). Dr. Ioffe is now a Professor of Physics at Rutgers University, New Brunswick NJ (USA).
10. Dr. Eduardo R. Gagliano (1989-1992), PhD Instituto Balseiro (1987). Dr. Gagliano was on the faculty of Instituto de Física Balseiro, Bariloche, Argentina. Dr. Gagliano passed away in 1998.
11. Dr. Silvia Bacci (1989-1992), PhD Instituto Balseiro (1989). Dr. Bacci is now at Instituto de Física Balseiro, Bariloche, Argentina.
12. Dr. Shivaji Sondhi (1992-1995), PhD UCLA (1992). Dr. Sondhi is now a Professor of Physics at Princeton University, Princeton NJ (USA).
13. Dr. Claudio C. Chamon (1995-1997), PhD MIT (1995); he is now Associate Professor of Physics at Boston University, Boston MA (USA).
14. Dr. José María Román Faúndez (1998-2002), PhD Universitat de Barcelona, Spain. PDRA at Universidade de Évora (Évora, Portugal) and at the Institute for Theoretical Physics, Consejo Superior de Investigación Científica, Madrid, Spain; now Chief Scientist, Service for Photovoltaic Systems, National Center for Renewable Energies (CENER), Navarra, Spain.
15. Dr. Daniel G. Barci (1999-2001), PhD Universidad de La Plata, Argentina (1995). He is now a tenured faculty member of the Departamento de Física, Universidad Estadual de Rio de Janeiro, RJ Brazil.
16. Dr. Wengsheng Vincent Liu (1999-2001), PhD University of Texas at Austin (1999). He was a Postdoctoral Research Associate at the Massachusetts Institute of Technology. He is now an Associate Professor of Physics at the University of Pittsburgh, Pittsburgh PA (USA).
17. Dr. Victoria Fernández, (PDRA 2003-2005) member of the faculty of the Department of Physics, University of La Plata, Argentina, and scientist at the National Research and Technology council (CONICET) of Argentina
18. Dr. Eddy Ardonne (2002-2005), PhD University of Amsterdam (2002). He was a postdoctoral research associate at the Quantum Information Institute of Caltech and at Station Q of Microsoft Corporation, University of California Santa Barbara (2005-2007). He is currently an Assistant Professor of Physics at NORDITA, Stockholm (Sweden).
19. Dr. Kumar S. Raman (2005-2007), PhD Princeton University (2005). He is currently a postdoctoral research associate at the Department of Physics of the University of California, Riverside, CA (USA).
20. Dr. Bruno Uchoa (2008-2010), PhD University of Campinas, Sao Paulo, Brazil.
21. Dr. Eytan Grosfeld (2008-2011), PhD Weizmann Institute of Science, Israel.
22. Dr. Taylor Hughes (2009-2011), PhD Stanford University, Stanford, CA (USA).

Grants:

I have been supported by the National Science Foundation since 1982 through a variety of grants, and by the US Department of Energy, Basic Energy Sciences division.

I am an Editor of the Journal of Statistical Mechanics: Theory and Experiment

Member of the Scientific Advisory Committee of the Institute for Theoretical Physics of the Faculty of Science of the University of Amsterdam (ITFA), The Netherlands.

I am a referee for Physical Review Letters, Physical Review B, Reviews of Modern Physics, Europhysics Letters, Nature, Science, Nuclear Physics B, Annals of Physics, American Journal of Physics, Journal of Mathematical Physics, Princeton University Press, and Cambridge University Press.

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PUBLICATIONS OF EDUARDO FRADKIN

1. Eduardo Fradkin and Tomas P. Eggarter, *Ising model with several phase transitions*, Phys. Rev. A **14**, 495 (1976).
2. Eduardo Fradkin and Leonard Susskind, *Order and disorder in gauge systems and magnets*, Phys. Rev. D **17**, 2637 (1978).
3. Eduardo Fradkin, Bernardo A. Huberman and Stephen H. Shenker, *Gauge symmetries in random magnetic systems*, Phys. Rev. B **18**, 4789 (1978).
4. Eduardo Fradkin and Stephen H. Shenker, *Phase diagrams of lattice gauge theories with Higgs fields*, Phys. Rev. D **19**, 3682 (1979).
5. Eduardo Fradkin and Stuart Raby, *Real space renormalization group scheme for spin and gauge systems*, Phys. Rev. D **20**, 2566 (1979).
6. Eduardo Fradkin, *Phase transitions in spin and gauge systems*, Ph. D. Thesis, Stanford University (1979) (unpublished).
7. Eduardo Fradkin, Mark Srednicki and Leonard Susskind, *Fermion representations for the \mathbf{Z}_2 lattice gauge theory in 2+1 dimensions*, Phys. Rev. D **21**, 2885 (1980).
8. Eduardo Fradkin and Leo P. Kadanoff, *Disorder variables and parafermions in two dimensional statistical mechanics*, Nucl. Phys. **170** [FS 1], 1, (1980).
9. Eduardo Fradkin and Gabor Forgacs, *Anisotropy and marginality in the two dimensional fully frustrated Ising model*, Phys. Rev. B **23**, 3442 (1981).
10. Eduardo Fradkin, Oscar Hernandez, Bernardo Huberman and Rahul Pandit, *Commensurate, incommensurate and chaotic states in a statistical mechanical system*, Nucl. Phys. **215** [FS], 137, (1983).
11. Eduardo Fradkin and Jorge E. Hirsch, *Effect of quantum fluctuations on the Peierls Instability: A Monte-Carlo study*, Phys. Rev. Lett. **49**, 402 (1982).
12. Eduardo Fradkin and Jorge E. Hirsch, *Phase diagram of one-dimensional electron-phonon systems. I: The SSH model*, Phys. Rev. B **27**, 1680 (1983).
13. Jorge E. Hirsch and Eduardo Fradkin, *Phase diagram of one-dimensional electron-phonon systems. II: The molecular crystal model*, Phys. Rev. B **27**, 4302 (1983).
14. Michael Ma and Eduardo Fradkin, *Localization and interactions in a disordered electron gas*, Phys. Rev. B **28**, 2990 (1983).
15. Eduardo Fradkin, *Roughening transition in quantum interfaces*, Phys. Rev. B **28** [RC], 5338 (1983).
16. Eduardo Fradkin, *Localization and interactions in a disordered electron gas*, in *Methods in Field Theory, École d'Été de Physique Théorique* (Les Houches, 1982), ed. J. B. Zuber and R. Stora, North-Holland, Amsterdam (1984).
17. Eduardo Fradkin, *The N-color Ashkin-Teller Model in two dimensions: Solution in the large-N limit*, Phys. Rev. Lett. **53**, 1967 (1984).
18. Matthew P. A. Fisher and Eduardo Fradkin, *Localization in a magnetic field: Tight binding model with one-half of a flux quantum per plaquette*, Nucl. Phys. **241** [FS 13], 457, (1985).
19. Eduardo Fradkin, *Critical behavior of disordered degenerate semiconductors, I: Models, symmetries and formalism*, Phys. Rev. B **33**, 3257 (1986).
20. Eduardo Fradkin, *Critical behavior of disordered degenerate semiconductors, II: Spectrum and transport properties in mean-field-theory*, Phys. Rev. B **33**, 3263 (1986).
21. Michael Ma and Eduardo Fradkin, *Superconductivity and localization in the presence of strong spin-orbit scattering*, Phys. Rev. Lett. **56**, 1416 (1986).
22. Eduardo Fradkin, Elbio Dagotto and Adriana Moreo, *A comment on the Nielsen-Ninomiya Theorem*, Phys. Lett. B **172**, 301 (1986).
23. Eduardo Fradkin, Paul Goldbart and Oliver Martin, *Gauge invariant spin glasses*, Phys. Rev. B **34**, 301 (1986).
24. David Withoff and Eduardo Fradkin, *Magnetization of the Coqblin-Schrieffer model in the large-N limit at near-zero field*, Phys. Rev. B **34** [RC], 8172 (1986).

25. Avinash Singh and Eduardo Fradkin, *Localization and correlation effects in itinerant ferromagnets*, Phys. Rev. B **35**, 6894 (1987) .
26. Eduardo Fradkin, Elbio Dagotto and Daniel Boyanovsky, *Physical realization of the Parity Anomaly in Condensed Matter Physics*, Phys. Rev. Lett. **57**, 2967 (1986); Erratum, Phys. Rev. Lett. **58**, 961 (1987) .
27. Daniel Boyanovsky, Elbio Dagotto and Eduardo Fradkin, *Anomalous currents, induced charge and bound states on a domain wall of a semiconductor*, Nucl. Phys. **285** [FS 9], 340, (1987) .
28. Eduardo Fradkin, *Anomalies in Condensed Matter Physics in Proceedings of Latin American School of Physics ELAF'87* (La Plata, Argentina, July 1987), C. Garcia Canal, Editor ,World Publishing Company, Singapore, 1988.
29. Eduardo Fradkin, *The Parity Anomaly in Condensed Matter Physics in Proceedings of Conference on Non-Perturbative Methods in Field Theory*, Laguna Beach, Jan. 1987, H. Hamber, Editor, Nucl. Phys. B (**Proc. Suppl.**) **1A**, 175 (1987).
30. Eduardo Fradkin and Mahito Kohmoto, *Quantized Hall effect and localization of electrons in lattices*, Phys. Rev. B **35**, 6017 (1987) .
31. Franco Nori, Qian Niu, Eduardo Fradkin and Shau-Jing Chang, *Superconducting normal phase boundary of quasicrystalline arrays in a magnetic field*, Phys. Rev. B **36**, 8338 (1987).
32. Eduardo Fradkin, Carlos M. Naon and Fidel A. Schaposnik, *Constrained Fermi systems and Virasoro Algebras*; Phys. Lett. **200B**, 95 (1987).
33. Eduardo Fradkin, Carlos M. Naon and Fidel A. Schaposnik, *Complete Bosonization of two-dimensional QCD in the path-integral framework*; Phys. Rev. **D36**, 3809 (1987).
34. Elbio Dagotto, Eduardo Fradkin and Adriana Moreo, *SU(2) gauge invariance and order parameters in strongly coupled electronic systems*; Phys. Rev. **B (RC) 38**, 2926 (1988).
35. Eduardo Fradkin and Michael Stone, *Topological terms in one- and two-dimensional quantum Heisenberg anti-ferromagnets*, Phys. Rev. B **38** [RC], 7215 (1988) .
36. Eduardo Fradkin, Cecilia von Reichenbach and Fidel A. Schaposnik, *Bosonization of the Kondo model*, Nucl. Phys. **316** [FS], 710, (1989) .
37. Leticia Cugliandolo, Eduardo Fradkin and Fidel A. Schaposnik, *Zero modes on the lattice: the vortex-fermion system*, Phys. Lett. B **224**, 407 (1989) .
38. David Withoff and Eduardo Fradkin, *Phase transitions in Gapless Fermi Systems with Magnetic Impurities*, Phys. Rev. Lett. **64**, 1835 (1990) .
39. Joel Cannon and Eduardo Fradkin, *The Phase Diagram of the Extended Hubbard Model in One Spatial Dimension*, Phys. Rev. B **41**, 9435 (1990) .
40. Eduardo Fradkin, *Jordan-Wigner Transformation for Quantum Spins Systems in Two Dimensions and Fractional Statistics*, Phys. Rev. Lett. **63**, 322 (1989) .
41. Eduardo Fradkin, *The Spectrum of Short Range Resonating Valence Bond Theories*, in *Field Theories in Condensed Matter Physics, a Workshop, Proceedings of the Johns Hopkins Workshop on Field Theories in Condensed Matter Physics*, Z. Tesanovic Editor (Addison Wesley, Redwood City (1990)).
42. Eduardo Fradkin and Steven Kivelson, *Short Range Resonating Valence Bond Theories and Superconductivity*, Mod. Phys. Lett. B **4**, 225 (1990) .
43. Christopher Mudry and Eduardo Fradkin, *Ground States of Infinite Range Spin One-Half Quantum Heisenberg Antiferromagnets*, Phys. Rev. B **40**, 11177 (1989) .
44. Eduardo Fradkin, Cecilia von Reichenbach and Fidel Schaposnik, *Conformal Properties of Kondo Models*, Nucl. Phys. B **340**, 692 (1990) .
45. Eduardo Fradkin, *Superfluidity of the Lattice Anyon Gas and Topological Invariance*, Phys. Rev. B **42**, 570 (1990) .
46. Eduardo Fradkin, *Superfluidity of the Lattice Anyon Gas*, in *Proceedings of the Anniversary Adriatico Research Conference and Workshop "Strongly Correlated Electron Systems"*, ICTP, Trieste, Italy 19 june- 21 july 1989), G. Baskaran *et al* Editors, World Scientific Publishers, Singapore 1990. Also published in Int. Jour. Mod. Phys. B **3**, 1965 (1990).
47. Xiao Gang Wen, Elbio Dagotto and Eduardo Fradkin, *Anyons on a Torus*, Phys. Rev. B **42**, 6110 (1990) .

48. Joel Cannon, Richard Scalettar and Eduardo Fradkin, *Ground State Phase Diagram of the One-Dimensional Extended Hubbard Model*, Phys. Rev. B **44**, 5995 (1991) .
49. Eduardo Fradkin, *Anyons For Beginners*, in *J. J. Giambiagi Festschrift* H. Falomir et. al. Editors, World Scientific Publishers, Singapore 1991.
50. Eduardo Fradkin and Fidel A. Schaposnik, *Chern-Simons Gauge Theories, Confinement and the Chiral Spin Liquid*, Phys. Rev. Lett. **66**, 276 (1991) .
51. Alexander Balatsky and Eduardo Fradkin, *The Singlet Quantum Hall Effect and Chern-Simons Gauge Theories*, Phys. Rev. **B43**, 10622 (1990).
52. Ana López and Eduardo Fradkin, *The Fractional Quantum Hall Effect and Chern-Simons Gauge Theories*, Phys. Rev. B **44**, 5246 (1991) .
53. Eduardo Fradkin, Enrique Moreno and Fidel Schaposnik, *Equivalence of the Path Integral Theory of Spinning Particles and the Topological Non Linear Sigma Model in D=2 Dimensions*, Phys. Rev. D **45**, 595 (1992) .
54. Eduardo Fradkin, *Field Theory of the Fractional Quantum Hall Effect*, in *Proceedings of the First Conference "Physics at High Magnetic Fields"*, E. Manousakis Editor, Tallahassee, Florida (May 14-18, 1991), Addison Wesley, Redwood City (1991).
55. Eduardo Fradkin, *Field Theories of Condensed Matter Systems*, Addison Wesley, Redwood City (1991).
56. Eduardo Fradkin, *Wave Functionals for Field Theories from Path Integrals*, Nucl. Phys. B **389**, 587 (1993) .
57. Ana López and Eduardo Fradkin, *Universal Properties of the Wave Functions of Fractional Quantum Hall Effect Systems*, Phys. Rev. Lett. **69**, 2126 (1992) .
58. Eduardo Fradkin, Enrique Moreno and Fidel Schaposnik, *Ground State Wave Functions for 1+1-dimensional Fermion Field Theories* , Nucl. Phys. B **392**, 667 (1993) .
59. Ana López and Eduardo Fradkin, *Response Functions and Spectrum of Collective Excitations of Fractional Quantum Hall Effect Systems*, Phys. Rev. B **47**, 7080 (1993); arXiv:cond-mat/9210019.
60. Ana López and Eduardo Fradkin, *Universality in the Fractional Quantum Hall Effect* , in *Proceedings of the Workshop on "Common Trends in Condensed Matter and High Energy Physics"*, L. Alvarez Gaume et. al. editors, Chia, Sardinia, Italy (September 1992), Nucl. Phys. B33C, Proc. Suppl. , 67 (1993)
61. Antonio H. Castro Neto and Eduardo Fradkin, *The Thermodynamics of Quantum Systems and Generalizations of Zamolodchikov's C-theorem*, Nucl. Phys. B **400**, 525 (1993); arXiv:cond-mat/9301009.
62. Eduardo Fradkin and Ana López, *Universality in the Fractional Quantum Hall Effect*, in *Low-Dimensional Quantum Field Theory For Condensed Matter Physicists, Proceedings of the Summer School on "Field Theories for Low Dimensional Condensed Matter Systems"*, S. Lundquist, G. Morandi and Yu Lu editors, Trieste, Italy (September 1992), World Scientific, Singapore (1995).
63. Antonio H. Castro Neto and Eduardo Fradkin, *Bosonization of the Low Energy Excitations of Fermi Liquids*, Phys. Rev. Lett. **72**, 1393 (1994); arXiv:cond-mat/9304014.
64. Antonio H. Castro Neto and Eduardo Fradkin, *Bosonization of Fermi Liquids*, Phys. Rev. B **49**, 10877 (1994); arXiv:cond-mat/9307005.
65. Ana López, Alberto Rojo and Eduardo Fradkin, *Chern-Simons Field theory for the two-dimensional quantum Heisenberg antiferromagnet*, Phys. Rev. B **49**, 15139 (1994); hep-th/9401156.
66. Antonio H. Castro Neto and Eduardo Fradkin, *Exact Solution of the Landau Fixed Point via Bosonization*, Phys. Rev. B **51**, 4084 (1995); arXiv:cond-mat/9310046.
67. Christopher Mudry and Eduardo Fradkin, *Separation of Spin and Charge Quantum Numbers in Strongly Correlated Systems*, Phys. Rev. B **49**, 5200 (1994); arXiv:cond-mat/9309021.
68. Christopher Mudry and Eduardo Fradkin, *The Mechanism of Separation of Spin and Charge in One-Dimensional Quantum Antiferromagnets*, Phys. Rev. B **50**, 11409 (1994); arXiv:cond-mat/9405064.
69. H. Q. Lin, Eduardo R. Gagliano, David K. Campbell, Eduardo H. Fradkin and Jim E. Gubernatis, in *The Hubbard Model*, edited by D. Baeriswyl et. al., (Plenum, New York, 1995), p. 315.
70. Carlos Cassanello and Eduardo Fradkin, *Bilayers of Chiral Spin States*, Phys. Rev. B **53**, 8708 (1996); arXiv:cond-mat/9502044.
71. Ana López and Eduardo Fradkin, *Fermionic Chern-Simons theory for the Fractional Quantum Hall Effect in Bilayers*, Phys. Rev. B **51**, 4347 (1995); arXiv:cond-mat/9406113 .

72. Eduardo Fradkin and Fidel A. Schaposnik, *The Fermion-Boson Mapping in Three Dimensional Quantum Field Theory*, Phys. Lett. B **338**, 253 (1994) .
73. Ninoslav Bràlic, Eduardo Fradkin, Virginia Manias and Fidel A. Schaposnik, *Bosonization of Three Dimensional Non-Abelian Fermion Field Theories*, Nucl. Phys. B **446**, 144 (1995) .
74. Manuel Fuentes, Ana López, Eduardo Fradkin and Enrique Moreno, *Bosonization rules in $\frac{1}{2} + 1$ dimensions*, Nucl. Phys. B **450**, 603 (1995); arXiv:cond-mat/9502076.
75. Manuel Fuentes, Ana López and Eduardo Fradkin, *Interacting electrons on a half line coupled to impurities*, Nucl. Phys. B **501**, 745 (1997); arXiv:cond-mat/9704012.
76. Manuel Fuentes, Ana López and Eduardo Fradkin, *Exact effective action for fermions in one dimension with backscattering at a boundary*, Phys. Rev. B **53**, 16568 (1996); arXiv:cond-mat/9506057.
77. Eduardo Fradkin and Steven Kivelson, *Modular Invariance, Self-Duality and The Phase Transition Between Quantum Hall Plateaus*, Nucl. Phys. B **474**, 543 (1996); arXiv:cond-mat/9603156.
78. Daniel Cabra, Eduardo Fradkin, Gerardo L. Rossini and Fidel A. Schaposnik, *Gauge Invariance and Finite Temperature Effective Actions of Chern-Simons Gauge Theories with Fermions*, Phys. Lett. B **383**, 434 (1996) .
79. Ana López and Eduardo Fradkin, *Fermionic Chern-Simons Field Theory for the Fractional Hall Effect*, in *Composite Fermions: A unified view of the Quantum Hall Regime*, edited by Olle Heinonen. World Scientific (Singapore, 1998).
80. Carlos R. Cassanello and Eduardo Fradkin, *Kondo Effect in Flux Phases*, Phys. Rev. B **53**, 15079 (1996); arXiv:cond-mat/9512064.
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