PUBLICATIONS OF EDUARDO FRADKIN

1. Eduardo Fradkin and Tomas P. Eggarter, *Ising model with several phase transitions*, Phys. Rev. A **14**, 495 (1976), doi:http://dx.doi.org/10.1103/PhysRevA.14.495.
2. Eduardo Fradkin and Leonard Susskind, *Order and disorder in gauge systems and magnets*, Phys. Rev. D **17**, 2637 (1978), doi:http://dx.doi.org/10.1103/PhysRevD.17.2637.
3. Eduardo Fradkin, Bernardo A. Huberman and Stephen H. Shenker, *Gauge symmetries in random magentic systems*, Phys. Rev. B **18**, 4789 (1978), doi:http://dx.doi.org/10.1103/PhysRevB.18.4789.
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 D. Thesis, Stanford University (1979) (unpublished).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. Gabor Forgacs and Eduardo Fradkin, *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'Eté 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. Naón and Fidel A. Schaposnik, *Constrained Fermi systems and Virasoro Algebras*, Phys. Lett. B **200**, 95 (1987).
33. Eduardo Fradkin, Carlos M. Naón and Fidel A. Schaposnik, *Complete Bosonization of two-dimensional QCD in the path-integral framework*, Phys. Rev. D **36**, 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 **38** [RC], 2926 (198)).
35. Eduardo Fradkin and Michael Stone, *Topological terms in one- and two-dimensional quantum Heisenberg antiferromagnets*, 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. J. 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. B **3**, 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): arXiv:hep-th/9207003 .
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. B **Supplement:33C**, 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.

81. Claudio de C. Chamon and Eduardo Fradkin, *Distinct universal conductances in tunneling to quantum Hall states: The role of contacts*, Phys. Rev. B **56**, 2012 (1997); arXiv:cond-mat/9612185.

82. Nancy P. Sandler, Claudio de C. Chamon and Eduardo Fradkin, *Andreev reflection in the fractional quantum Hall effect*, Phys. Rev. B **57**, 12324 (1998); arXiv:cond-mat/9704012.

83. Horacio E. Castillo, Claudio de C. Chamon, Eduardo Fradkin, Paul M. Goldbart and Christopher Mudry, *Exact calculation of multifractal exponents of the critical wave function of Dirac fermions in a random magnetic field*, Phys. Rev. B **56**, 10668 (1997).

84. Carlos R. Cassanello and Eduardo Fradkin, *Overscreening of magnetic impurities in $d_{x^2-y^2}$-wave superconductors*, Phys. Rev. B **56**, 11246 (1997); arXiv:cond-mat/9704011.

85. Eduardo Fradkin, *Superconductivity's cousin*, Nature (London) **387**, 18 (1997) .

86. Steven A. Kivelson, Eduardo Fradkin and Victor J. Emery, *Electronic Liquid Crystal Phases of a Doped Mott Insulator*, Nature (London) **393**, 550 (1998); arXiv: cond-mat/9707327.

87. Eduardo Fradkin, Chetan Nayak, Alexei Tsvelik and Frank Wilczek, *A Chern-Simons Effective Field Theory for the Pfaffian Quantum Hall State*, Nucl. Phys. B **516**, 704 (1998).

88. Nancy P. Sandler, Claudio de C. Chamon and Eduardo Fradkin, *Noise measurements and fractional charge in fractional quantum Hall liquids*, Phys. Rev. B **59**, 12521 (1999).

89. Eduardo Fradkin and Steven Kivelson, *Liquid Crystal Phases of Quantum Hall Systems*, Phys. Rev. B **59**, 8065 (1999).

90. Ana López and Eduardo Fradkin, *Universal structure of the edge states of the fractional quantum Hall states*, Phys. Rev. B **59**, 15323 (1999), doi: http://dx.doi.org/10.1103/PhysRevB.59.15323.

91. Eduardo Fradkin, Chetan Nayak, and Kareljan Schoutens *Landau-Ginzburg Theories for Non-Abelian Quantum Hall States*, Nucl. Phys. B **546**, 711 (1999).

92. Cesar D. Fosco, Eduardo Fradkin and Ana López, *Dynamical Domain Wall Defects in $2+1$ Dimensions*, Phys. Lett. B **451**, 31 (1999).

93. Daniel C. Cabra, Eduardo Fradkin, Gerardo L. Rossini and Fidel A. Schaposnik, *Non-Abelian fractional quantum Hall states and chiral coset conformal field theories*, Int. J. Mod. Phys. A **30**, 4857 (2000); arXiv:cond-mat/9905192.

94. Eduardo Fradkin, *Exploring the fractional quantum Hall effect with electron tunneling*, in *Quantum Physics at the Mesoscopic Scale*, Proceedings of the XXXIVth Rencontres de Moriond, Edited by C. Glattli, M. Sanquer and J. Trânh Vân, Les Arcs, Haute Savoie, France , January 1999, EDP Sciences (Les Ulis, France, 2000).

95. Eduardo Fradkin, Steven A. Kivelson, Efstratios Manousakis and Kwangsik Nho, *Nematic phase of the two-dimensional electron gas in a magnetic field*, Phys. Rev. Lett. **84**, 1982 (2000), doi: http://dx.doi.org/10.1103/PhysRevLett.8 arXiv:cond-mat/9906064.

96. Victor J. Emery, Eduardo Fradkin, Steven A. Kivelson and Tom C. Lubensky, *Quantum Theory of the Smectic Metal State in Stripe Phases*, Phys. Rev. Lett. **85**, 2160 (2000), doi: http://dx.doi.org/10.1103/PhysRevLett.85.2160; arXiv:cond-mat/0001077.

97. Ana López and Eduardo Fradkin, *Effective field theory for the bulk and edge states of quantum Hall states in unpolarized single layer and bilayer systems*, Phys. Rev. B **63**, 085306 (2001), doi: http://dx.doi.org/10.1103/PhysRevB.63.0853 arXiv:cond-mat/0008219.

98. Ana López and Eduardo Fradkin, *Erratum: Effective field theory for the bulk and edge states of quantum Hall states in unpolarized single layer and bilayer systems*, Phys. Rev. B **64**, 049903 (2001), doi: http://dx.doi.org/10.1103/PhysRevB.64.049903.

99. Wensheng Vincent Liu and Eduardo Fradkin, *Antiferromagnetic spin ladders effectively coupled by one-dimensional electron liquids*, Phys. Rev. Lett. **86**, 1865 (2001), doi: http://dx.doi.org/10.1103/PhysRevLett.86.1865; arXiv:cond-mat/0008394.

100. Nancy P. Sandler and Eduardo Fradkin, *Fractional quantum Hall junctions and two-channel Kondo models*, Phys. Rev. B **63**, 23530 (2001), doi: http://dx.doi.org/10.1103/PhysRevB.63.235301 ; arXiv:cond-mat/0009285.

101. Mats Granath, Vadim Oganesyan , Steven A. Kivelson, Eduardo Fradkin and Victor J. Emery, *Nodal quasiparticles and coexisting orders in striped superconductors*, Phys. Rev. Lett. **87**, 167011 (2001), doi: http://dx.doi.org/10.1103 arXiv:cond-mat/0010350.

102. Eduardo Fradkin, Marina Huerta and Guillermo R. Zemba, *Effective Chern-Simons Theories of Pfaffian and Parafermionic Quantum Hall States, and Orbifold Conformal Field Theories*, Nucl. Phys. **601** [FS], 3, (591)2001; arXiv:cond-mat/0011143.

103. Vadim Oganesyan, Steven A. Kivelson, and Eduardo Fradkin, *Quantum Theory of a Nematic Fermi Fluid*, Phys. Rev. B **64**, 195109 (2001), doi: http://dx.doi.org/10.1103/PhysRevB.64.195109; arXiv:cond-mat/0102093.

104. R. Moessner, S. L. Sondhi and Eduardo Fradkin, *Short-ranged RVB physics, quantum dimer models and Ising gauge theories*, Phys. Rev. B **65**, 024504 (2002), doi: http://dx.doi.org/10.1103/PhysRevB.65.024504; arXiv:cond-mat/0103396.

105. Daniel G. Barci, Eduardo Fradkin, Steven A. Kivelson and Vadim Oganesyan, *Theory of the Quantum Smectic Hall Phase I: Low-energy properties of the quantum Hall smectic fixed point*, Phys. Rev. B **65**, 245319 (2002), doi: http://dx.doi.org/10.1103/PhysRevB.65.245319; arXiv:cond-mat/0105448.

106. Daniel G. Barci and Eduardo Fradkin, *Theory of the Quantum Smectic Hall Phase II: Microscopic theory*, Phys. Rev. B **65**, 245320 (2002), doi: http://dx.doi.org/10.1103/PhysRevB.65.245320; arXiv:cond-mat/0106171.

107. Steven A. Kivelson, Dung-Hai Lee, Eduardo Fradkin and Vadim Oganesyan, *Competing Order in the Mixed State of High Temperature Superconductors*, Phys. Rev. B **66**, 144516/1-8 (2002), doi: http://dx.doi.org/10.1103/PhysRevB.66.14 arXiv:cond-mat/0205228.

108. Eun-Ah Kim and Eduardo Fradkin, *Inter edge tunneling in quantum Hall line junctions*, Phys. Rev. B **67**, 045317 (2003), doi: http://dx.doi.org/10.1103/PhysRevB.67.045317; arXiv:cond-mat/0205629.

109. Congjun Wu, W. Vincent Liu and Eduardo Fradkin, *Competing Orders in Coupled Luttinger Liquids*, Phys. Rev. B **68**, 115104 (2003), doi: http://dx.doi.org/10.1103/PhysRevB.68.115104; arXiv:cond-mat/0206248.

110. Eduardo Fradkin, Vishnu Jejjala and Robert G. Leigh, *Non-commutative Chern-Simons for the Quantum Hall system and Duality*, Nucl. Phys. B **642**, 483-500 (2002); arXiv:cond-mat/0205653.

111. Steven A. Kivelson, Ian P. Bindloss, Eduardo Fradkin, Vadim Oganesyan, John Tranquada, Aharon Kapitulnik and Craig Howald, *How to detect fluctuating stripes in high temperature superconductors*, Rev. Mod. Phys. **75**, 1201 (2003), doi:10.1103/RevModPhys.75.1201; arXiv:cond-mat/02010683.

112. Steven A. Kivelson, Eduardo Fradkin, and Theodore H. Geballe, *Quasi-1D dynamics and the Nematic phase of the 2D Emery model*, Phys. Rev. B **69**, 144505 (2004), doi: http://dx.doi.org/10.1103/PhysRevB.69.144505; arXiv:cond-mat/0302163.

113. Eun-Ah Kim and Eduardo Fradkin, *Double point contact in Quantum Hall Line Junctions*, Phys. Rev. Lett. **91**, 156801 (2003), doi: http://dx.doi.org/10.1103/PhysRevLett.91.156801; arXiv:cond-mat/0305693.

114. Enrico Arrigoni, Eduardo Fradkin and Steven A. Kivelson, *Mechanism of High Temperature Superconductivity in a striped Hubbard Model*, Phys. Rev. B **69**, 214519 (2004), doi: http://dx.doi.org/10.1103/PhysRevB.69.214519; arXiv:cond-mat/0309572.

115. Ana López and Eduardo Fradkin, *Fermion Chern Simons Theory of Hierarchical Fractional Quantum Hall States*, Phys. Rev. B **69**, 155322 (2004), doi: http://dx.doi.org/10.1103/PhysRevB.69.155322; arXiv:cond-mat/0310128.

116. Eduardo Fradkin, David Huse, Roderich Moessner, Vadim Oganesyan, and Shivaji L. Sondhi, *Bipartite Rokhsar-Kivelson points and Cantor deconfinement*, Phys. Rev. B **69**, 224415 (2004), doi: http://dx.doi.org/10.1103/PhysRevB.69.224 arXiv:cond-mat/0311353.

117. Eddy Ardonne, Paul Fendley and Eduardo Fradkin, *Topological Order and Conformal Quantum Critical Points*, Ann. Phys (N.Y.) **310**, 493 (2004); arXiv:cond-mat/0311466.

118. I. Yang, W. Kang, K.W. Baldwin, L.N. Pfeiffer, K.W. West, E.A. Kim and E. Fradkin, *Quantum Hall line junction with impurities as a multislit Luttinger liquid interferometer*, Phys. Rev. B **71**, 113312 (2005), doi: http://dx.doi.org/10.1103/PhysRevB.71.113312; arXiv:cond-mat/0407641.

119. Eun-Ah Kim, Smitha Vishveshwara, and Eduardo Fradkin, *Cooper pair tunneling in singlet quantum Hall states/superconductor junctions*, Phys. Rev. Lett. **93**, 266803 (2004), doi: http://dx.doi.org/10.1103/PhysRevLett.93.266803 arXiv:cond-mat/0405156.

120. Michael J. Lawler and Eduardo Fradkin, *Quantum Hall Smectics, Sliding Symmetry and the Renormalization Group*, Phys. Rev. B **70**, 165310 (2004), doi: http://dx.doi.org/10.1103/PhysRevB.70.165310; arXiv:cond-mat/0405237.

121. Enrico Arrigoni, Eduardo Fradkin and Steven Kivelson, *Competition Between Charge-Density Waves and Superconductivity in Striped Systems*, Proceedings of the SCES'04, International Conference on Strongly Correlated Electron Systems, Universität Karlsruhe (Germany) July 26-30, 2004, Physica B **359**, 623 (2005); arXiv:cond-mat/0409693.

122. Zohar Nussinov and Eduardo Fradkin, *Discrete Sliding Symmetries, Dualities, and Self-dualities of Quantum Orbital Compass Models and $p + ip$ Superconducting Arrays*, Phys. Rev. B **71**, 195120 (2005), doi: http://dx.doi.org/10.1103/PhysRevB.71.195120; arXiv:cond-mat/0410720.

123. Stuart E. Brown, Eduardo Fradkin and Steven A. Kivelson, *Surface pinning of fluctuating charge order: an "extraordinary" surface phase transition*, Phys. Rev. B **71**, 224512 (2005), doi: http://dx.doi.org/10.1103/PhysRevB.71.224512; arXiv:cond-mat/0501654.

124. Paul Fendley and Eduardo Fradkin, *Realizing non-Abelian statistics in time reversal invariant systems*, Phys. Rev. B **72**, 024412 (2005), doi: http://dx.doi.org/10.1103/PhysRevB.72.024412; arXiv:cond-mat/cond-mat/0502071.

125. Eun-Ah Kim, Michael J. Lawler, Smitha Vishveshwara, and Eduardo Fradkin, *Signatures of fractional statistics in noise experiments in quantum Hall fluids*, Phys. Rev. Lett. **95**, 176402 (2005), doi: http://dx.doi.org/10.1103/PhysRevLett.95 arXiv:cond-mat/0507428. (Physical Review Focus)

126. Steven A. Kivelson and Eduardo Fradkin, *How optimal inhomogeneity produces high temperature superconductivity*; chapter 15 of *Treatise of High Temperature Superconductivity*, J. Robert Schrieffer and J. Brooks, editors, Springer-Verlag (2007); arXiv:cond-mat/0507459.

127. Michael J. Lawler, Daniel G. Barci, Victoria Fernández, Eduardo Fradkin, and Luis Oxman, *Non-perturbative behavior of the quantum phase transition to a nematic Fermi fluid*, Phys. Rev. B **73**, 085101 (2006), doi: http://dx.doi.org/10.1103/PhysRevB.73.085101; arXiv:cond-mat/0508747.

128. Erica W. Carlson, Karin Dahmen, Eduardo Fradkin, and Steven Kivelson, *Hysteresis and Noise from Electronic Nematicity in High Temperature Superconductors*, Phys. Rev. Lett. **96**, 097003 (2006), doi: http://dx.doi.org/10.1103/PhysR arXiv:cond-mat/0510259.

129. Antonio H. Castro Neto, Pierre Pujol and Eduardo Fradkin, *Ice: a strongly correlated proton system*, Phys. Rev. B **74**, 024302 (2006), doi: http://dx.doi.org/10.1103/PhysRevB.74.024302; arXiv:cond-mat/0511092.

130. John Robertson, Stevan A. Kivelson, Eduardo Fradkin, Alan Fang, and Aharon Kapitulnik, *Distinguishing Patterns of Charge Order; Stripes or Checkerboards*, Phys. Rev. B **74**, 134507 (2006), doi: http://dx.doi.org/10.1103/PhysRevB. arXiv:cond-mat/0602675.

131. Zohar Nussinov, Cristian Batista and Eduardo Fradkin, *Intermediate Symmetries In Electronic Systems: Dimensional Reduction, Order Out Of Disorder, Dualities, And Fractionalization*, to appear in Proceedings of the 13th International Conference on Recent Progress in Many Body Theories, Buenos Aires (Argentina), December 2005, S. Hernández and H. Cataldo editors (World Scientific, 2006); published in Int. J. Mod. Phys. B **20**, 5239-5249 (2006); arXiv:cond-mat/0602569.

132. Eun-Ah Kim, Michael J. Lawler, Smitha Vishveshwara, and Eduardo Fradkin, *Measuring fractional charge and statistics in fractional quantum Hall fluids through noise experiments*, Phys. Rev. B **74**, 155324 (2006), doi: http://dx.doi.org/10.1103/PhysRevB.74.155324; arXiv:cond-mat/0604325.

133. Michael J. Lawler and Eduardo Fradkin, *Local Quantum Criticality in the Nematic Quantum Phase Transition of a Fermi Fluid*, Phys. Rev. B **75**, 033304 (2007), doi: http://dx.doi.org/10.1103/PhysRevB.75.033304; arXiv:cond-mat/0605203.

134. Eduardo Fradkin and Joel E. Moore, *Entanglement entropy of 2D conformal quantum critical points: hearing the shape of a quantum drum*, Phys. Rev. Lett. **97**, 050404 (2006), doi: http://dx.doi.org/10.1103/PhysRevLett.97.050404; arXiv:cond-mat/0605683.

135. Stefanos Papanikolaou, Erik Luijten and Eduardo Fradkin, *Quantum criticality, lines of fixed points, and phase separation in doped two-dimensional quantum dimer models*, Phys. Rev. B **76**, 134514 (2007), doi: http://dx.doi.org/10.1103/PhysRevB.76.134514; arXiv: cond-mat/0607316.

136. Claudio Chamon, Eduardo Fradkin and Ana López, *Fractional statistics and duality: strong coupling behavior of edge states of quantum Hall liquids in the Jain sequence*, Phys. Rev. Lett. **98**, 176801 (2007), doi: http://dx.doi.org/10.1103/PhysRevLett.98.176801; arXiv: cond-mat/0608520

137. Congjun Wu, Kai Sun, Eduardo Fradkin and Shoucheng Zhang, *Fermi liquid instabilities in the spin channel*, Phys. Rev. B **75**, 115103 (2007), doi: http://dx.doi.org/10.1103/PhysRevB.75.115103; arXiv: cond-mat/0610326.

138. Stefanos Papanikolaou, Kumar S. Raman, and Eduardo Fradkin, *Devil's staircases, quantum dimer models and stripe formation in strong coupling models of quantum frustration*, Phys. Rev. B **75**, 094406 (2007), doi: http://dx.doi.org/10.1103/PhysRevB.75.094406; arXiv: cond-mat/0611390.

139. Eduardo Fradkin, Steven A. Kivelson and Vadim Oganesyan, *Discovery of a Nematic Electron Fluid in a Transition Metal Oxide*, "Perspectives in Science" invited article, Science **315**, 196 (2007).

140. Erez Berg, Eduardo Fradkin, Eun-Ah Kim, Steven Kivelson, Vadim Oganesyan, John M. Tranquada, and Shoucheng Zhang, *Dynamical layer decoupling in a stripe-ordered high T_c superconductor*, Phys. Rev. Lett. **99**, 127003 (2007), doi: http://dx.doi.org/10.1103/PhysRevLett.99.127003; arXiv: 0704.1240 [cond-mat.str-el].

141. Eun-Ah Kim, Michael J. Lawler, Paul Oreto, Subir Sachdev, Eduardo Fradkin and Steven A. Kivelson, *Theory of the nodal nematic quantum phase transition in superconductors*, Phys. Rev. B **77**, 184514 (2008), doi: http://dx.doi.org/10.1103/PhysRevB.77.184514; arXiv: 0705.4099 [cond-mat.str-el].

142. Kumar S. Raman, Eduardo Fradkin, Roderich Moessner, Stefanos Papanikolaou, and Shivaji L. Sondhi, *Quantum dimer models and exotic orders*, in "Quantum Magnetism" (Proceedings of the Nato Advanced Science Institute on Quantum Magnetism), Les Houches France, 6-23 June (2006), B. Barbara, Y. Imry, G. Sawatzky, and P. C. E. Stamp editors, pp. 139-150, (Springer Netherlands, 2008); arXiv:0809.3050.

143. Stefanos Papanikolaou, Kumar S. Raman and Eduardo Fradkin, *Topological phases and topological entropy of two-dimensional systems with finite correlation length*, Phys. Rev. B **76**, 224421 (2007), doi: http://dx.doi.org/10.1103/PhysI arXiv:0709.0729 [cond-mat.str-el].

144. H. Barath, M. Kim, J.F. Karpus, S.L. Cooper, P. Abbamonte, E. Fradkin, E. Morosan, and R.J. Cava, *Quantum and classical mode softening near the charge-density-wave/superconductor transition of Cu_xTiSe_2: Raman spectroscopic studies*, Phys. Rev. Lett. **100**, 106402 (2008), doi: http://dx.doi.org/10.1103/PhysRevLett.100.106402; arXiv:0712.2013 [cond-mat.sup-con] (2007).

145. M. Kim, H. Barath, S.L. Cooper, P. Abbamonte, E. Fradkin, M. Rübhausen, C. L. Zhang, and S-W. Cheong, *Raman Scattering Studies of Temperature- and Field-Induced Melting of Charge Order in (La,Pr,Ca)MnO_3*, Phys. Rev. B **77**, 134411 (2008), doi: http://dx.doi.org/10.1103/PhysRevB.77.134411; arXiv:0801.3737.

146. Stefanos Papanikolaou, Rafael Monteiro Fernandes, Eduardo Fradkin, Philip W. Phillips, Joerg Schmalian, and Ratsko Sknepnek, *Universality of liquid-gas Mott transitions at finite temperatures*, Phys. Rev. Lett. **100**, 026408/1-4 (2008), doi: http://dx.doi.org/10.1103/PhysRevLett.100.026408; arXiv:0710.1627 [cond-mat.sup-con] (2007).

147. Shying Dong, Eduardo Fradkin, Robert G. Leigh, and Sean Nowling, *Topological Entanglement Entropy in Chern-Simons Theories and Quantum Hall Fluids*, J. High Ener. Phys. **2008** (05), 016 (2008) (JHEP05(2008)016), doi:10.1088/1126-6708/2008/05/016; arXiv:0802.3231 (2008).

148. Dirk Schuricht, Fabian Essler, Akbar Jaefari, and Eduardo Fradkin, *Local density of states of 1D Mott insulators and CDW states with a boundary*, Phys. Rev. Lett. **101**, 086403 (2008), doi: http://dx.doi.org/10.1103/PhysRevLett.101.086 arXiv:0802.1544.

149. Kai Sun, Benjamín Muñoz Fregoso, Michael J. Lawler, and Eduardo Fradkin, *Fluctuating Stripes in Strongly Correlated electron Systems and the Nematic-Smectic quantum phase transition*, Phys. Rev. B **78**, 085124 (2008), doi: http://dx.doi.org/10.1103/PhysRevB.78.085124; Erratum: Phys. Rev. B **80**, 039901 (2009), doi: http://dx.doi.org/10.1103/PhysRevB.80.039901; arXiv:0805.3526.

150. Eduardo Fradkin, *Quantum physics: Debut of the quarter electron*, News & Views invited article, Nature (London) **452**, 822-823 (2008).

151. H. Barath, M. Kim, S. L. Cooper, P. Abbamonte, E. Fradkin, I. Mahns, M. Rübhausen, N. Aliouane, and D. N. Argyriou, *Domain fluctuations near the field-induced incommensurate-commensurate phase transition of $TbMnO_3$*, Phys. Rev. B **78**, 134407 (2008), doi: http://dx.doi.org/10.1103/PhysRevB.78.134407; arxiv:0810.xxxx. (recommended as Editor's suggestion)

152. Kai Sun and Eduardo Fradkin, *Time reversal symmetry breaking and spontaneous anomalous Hall effect in Fermi fluids*, Phys. Rev. B **78**, 245122 (2008), doi: http://dx.doi.org/10.1103/PhysRevB.78.245122; arXiv:0809.4731.

153. Erez Berg, Eduardo Fradkin, and Steven A. Kivelson, *Theory of the striped superconductor*, Phys. Rev. B **79**, 064515 (2009), doi: http://dx.doi.org/10.1103/PhysRevB.79.064515; arXiv:0810.1564. (recommended as Editor's suggestion).

154. Benjamin Hsu, Michael Mulligan, Eduardo Fradkin and Eun-Ah Kim, *Universal behavior of the entanglement entropy in 2D conformal quantum critical points*, Phys. Rev. B **79**, 115421 (2009), doi: http://dx.doi.org/10.1103/PhysRevB.79 arXiv:0812.0203.

155. Erez Berg, Eduardo Fradkin, Steven A. Kivelson, and John M. Tranquada, *Striped Superconducting Order: How the cuprates intertwine spin, charge and superconducting orders*, New J. Phys. **11**, 115004 (2009); arXiv:0901.4826.

156. Benjamín M. Fregoso, Kai Sun, Eduardo Fradkin, and Benjamin L. Lev, *Biaxial nematic phases in ultracold dipolar Fermi gases*, New J. Phys. **11**, 103003 (2009); doi: 10.1088/1367-2630/11/10/103003 ; arXiv:0902.0739.

157. Erez Berg, Eduardo Fradkin, and Steven A. Kivelson, *Charge* 4*e superconductivity from pair density wave order in certain high temperature superconductors*, Nature Physics **5**, 830 (2009), doi:10.1038/nphys1389; arXiv:0904.1230.

158. Kai Sun, Hong Yao, Eduardo Fradkin, and Steven A. Kivelson, *Topological Insulators and Nematic Phases from Spontaneous Symmetry Breaking in 2D Fermi Systems with a Quadratic Band Crossing*, Phys. Rev. Lett. **103**, 046811 (2009), doi:10.1103/PhysRevLett.103.046811; arXiv:0905.0907.

159. Eduardo Fradkin, *Scaling of Entanglement Entropy at 2D quantum Lifshitz fixed points and topological fluids*, J. Phys. A: Math. Theor. **42**, 504011 (2009), (special issue on Entanglement Entropy, P. Calabrese, J. Cardy and B. Doyon, editors); doi: 10.1088/1751-8113/42/50/504011; arXiv:0906.1569v1.

160. Benjamín M. Fregoso and Eduardo Fradkin, *Ferro-Nematic ground state of the dilute dipolar Fermi gas*, Phys. Rev. Lett. **103**, 205301 (2009), doi:10.1103/PhysRevLett.103.205301; arXiv:0907.1345.

161. Benjamin Hsu, Eytan Grosfeld, and Eduardo Fradkin, *Quantum noise and entanglement generated by a local quantum quench*, Phys. Rev. B **80**, 235412 (2009) (Editor's suggestion), doi:10.1103/PhysRevB.80.235412; arXiv:0908.2622.

162. David S. Caplan, Vladimir Orlyanchik, Michael B. Weissman, Dale J. Van Harlingen, Eduardo Fradkin, M. Hinton, and Tom R. Lemberger, *Anomalous Noise in the Pseudogap Regime of* $YBa_2Cu_3O_{7-\delta}$, Phys. Rev. Lett. **104**, 177001 (2010), doi:10.1103/PhysRevLett.104.177001; arXiv:1004.5554.

163. Eduardo Fradkin, Steven A. Kivelson, Michael J. Lawler, James P. Eisenstein, and Andrew Mackenzie, *Nematic Fermi Fluids in Condensed Matter Physics*, Annu. Rev. Condens. Matter Phys. **1**, 153 (2010), doi:10.1146/annurev-conmatphys-070909-103925; arXiv:0910.4166.

164. Minjung Kim, Xiaoqian Chen, Young Il Joe, Eduardo Fradkin, Peter Abbamonte, and S. Lance Cooper, *Mapping the magneto-structural quantum phases of* Mn_3O_4, Phys. Rev. Lett. **104**, 136402 (2010), doi:10.1103/PhysRevLett.104.13640 arXiv:0912.2052.

165. Eduardo Fradkin and Steven A. Kivelson, *Electron Nematics Proliferate*, "Perspectives" invited article, Science **327**, 155 (2010).

166. Minjung Kim, Harini Barath, Xiaoqian Chen, Young-Il Joe, Eduardo Fradkin, Peter Abbamonte, S. Lance Cooper, *Magnetic Field and Pressure Controlled Phases in Complex Materials*, Advanced Materials **22**, 1148 (2010).

167. Benjamín M. Fregoso and Eduardo Fradkin, *Unconventional magnetism in imbalanced Fermi systems with magnetic dipolar interactions*, Phys. Rev. B **81**, 214443 (2010), doi:10.1103/PhysRevB.81.214443; arXiv:1001.4167.

168. Steven A. Kivelson and Eduardo Fradkin, *Fluctuation diamagnetism in high temperature superconductors*, "Viewpoint" invited article, Physics **3**, 15 (2010), doi: 10.1103/Physics.3.15; arXiv:1003.5594.

169. James P. Reed, Bruno Uchoa, Young Il Joe, Yu Gan, Diego Casa, Eduardo Fradkin, and Peter Abbamonte, *The effective fine structure constant of freestanding graphene measured in graphite*, Science **330**, 805-808 (2010), doi:10.1126/science.1190920; arXiv:1011.1590.

170. Eduardo Fradkin, *Electronic Liquid Crystal Phases in Strongly Correlated Systems* , in Proceedings of the Les Houches Summer School on "Modern theories of correlated electron systems", Les Houches, Haute Savoie, France (May 2009), Daniel C. Cabra, Andreas Honecker, and Pierre Pujol, editors, Lecture Notes in Physics 843, Springer-Verlag Berlin Heidelberg (2012), doi:10.1007/978-3-642-10449-7_2; arXiv:1004.1104

171. Erez Berg, Eduardo Fradkin and Steven A. Kivelson, *Pair Density Wave correlations in the Kondo-Heisenberg Model*, Phys. Rev. Lett. **105**, 146403 (2010), doi:10.1103/PhysRevLett.105.146403; arXiv:1005.0623.

172. Daniel G. Barci and Eduardo Fradkin, *Role of nematic fluctuations in the thermal melting of pair-density-wave phases in two-dimensional superconductors*, Phys. Rev. B **83**, 100509(R) (2011); doi:10.1103/PhysRevB.83.100509; arXiv:1005.1928.

173. Benjamin Hsu and Eduardo Fradkin, *Universal Behavior of Entanglement in 2D Quantum Critical Models*, J. Stat. Mech.: Theor. Exp., **2010**, P09004 (2010), doi:10.1088/1742-5468/2010/09/P09004; arXiv:1006.1361.

174. Akbar Jaefari, Siddhartha Lal and Eduardo Fradkin, *Charge-Density-Wave and Superconductor Competition in Stripe Phases of High Temperature Superconductors*, Phys. Rev. B **82**, 144531 (2010), doi:10.1103/PhysRevB.82.144531; arXiv:1007.2187.

175. Dirk Schuricht, Fabian H. L. Essler, Akbar Jaefari, and Eduardo Fradkin, *Boundary effects on the local density of states of one-dimensional Mott insulators and charge density wave states*, Phys. Rev. B **83**, 035111 (2011), doi:10.1103/PhysRevB.83.035111; arXiv:1009.5587.

176. Taylor L. Hughes, Robert G. Leigh and Eduardo Fradkin, *Torsional Response and Dissipationless Viscosity in Topological Insulators*, Phys. Rev. Lett. **102**, 075502 (2011), doi:10.1103/PhysRevLett.107.075502; arXiv:1101.3541.

177. Bruno Uchoa, James P. Reed, Yu Gan, Young Il Joe, Eduardo Fradkin, Peter Abbamonte, and Diego Casa, *The electron many-body problem in graphene*, Proceedings of the Nobel Conference on Graphene and Quantum Matter, Phys. Scr. T **2012**, 144 (2012); doi:10.1088/0031-8949/2012/T146/014014; arXiv:1109.1577.

178. Liliana Arrachea and Eduardo Fradkin, *Chiral heat transport in driven quantum Hall and quantum spin Hall edge states*, Phys. Rev. B **84**, 235436 (2011), doi:10.1103/PhysRevB.84.235436; arXiv:1110.1408.

179. Akbar Jaefari and Eduardo Fradkin, *Pair-density-wave superconducting order in two-leg ladders*, Phys. Rev. B **85**, 035104 (2012), doi:10.1103/PhysRevB.85.035104; arXiv:1111.6320.

180. Benjamin Hsu and Eduardo Fradkin, *Dynamical stability of the quantum Lifshitz theory in* $2+1$ *Dimensions*, Phys. Rev. B **87**, 085102 (2013),doi:10.1103/PhysRevB.87.085102; arXiv:1205.4911

181. Xiao Chen, Benjamin Hsu, Taylor Hughes and Eduardo Fradkin, *The Rényi Entropy and the Multifractal Spectrum of Systems Near the Localization Transition*, Phys. Rev. B **86**, 134201 (2012), doi:10.1103/PhysRevB.86.134201; arXiv:1205.5276.

182. AtMa Chan, Taylor L. Hughes, Shinsei Ryu, and Eduardo Fradkin, *Effective field theories for topological insulators by functional bosonization*, Phys. Rev. B **87**, 085132 (2013), doi:10.1103/PhysRevB.87.085132; arXiv:1210.4305.

183. Eduardo Fradkin and Steven A. Kivelson, *High Temperature Superconductivity: Ineluctable Complexity*, invited News & Views article, Nature Physics **8**, 864 (2012); doi:10.1038/nphys2498.

184. Ariel Dobry, Akbar Jaefari, and Eduardo Fradkin, *Inhomogeneous superconducting phases in the frustrated Kondo-Heisenberg chain*, Phys. Rev. B **87**, 245102 (2013), doi: 10.1103/PhysRevB.87.245102; arXiv:1304.5256.

185. Hugo Aita, Liliana Arrachea, Carlos Naón, and Eduardo Fradkin, *Heat transport through quantum Hall edge states: Tunneling versus capacitive coupling to reservoirs*, Phys. Rev. B **88**, 085122 (2013), doi: 10.1103/PhysRevB.88.085122; arXiv:1305.5833.

186. Xiao Chen and Eduardo Fradkin, *Quantum Entanglement and Thermal Reduced Density Matrices in Fermion and Spin Systems on Ladders*, J. Stat. Mech.: Theor. Exp., **2013**, P08013 (2013), doi:10.1088/1742-5468/2013/08/P08013; arXiv:1305.6538.

187. Y. I. Joe, X. M. Chen, P. Ghaemi, K. D. Finkelstein, G. A. de la Peña, Y. Gan, J. C. T. Lee, S. Yuan, J. Geck, G. J. MacDougall, T. C. Chiang, S. L. Cooper, E. Fradkin, P. Abbamonte, *Emergence of charge density wave domain walls above the superconducting dome in* $TiSe_2$, Nature Physics **10**, 421 (2014), doi:10.1038/nphys2935; arXiv:1309.4051.

188. Stefanos Papanikolaou, Daniel Charrier and Eduardo Fradkin, *Ising nematic phase of hard-core dimers on the square lattice*, Phys. Rev. B **89**, 035128 (2014), doi:10.1103/PhysRevB.89.035128; arXiv:1310.4173.

189. Yizhi You and Eduardo Fradkin, *Field Theory of Nematicity in the Spontaneous Quantum Anomalous Hall effect*, Phys. Rev. B **88**, 235124 (2013) (Editor's suggestion), doi:10.1103/PhysRevB.88.235124; arXiv:1310.5727.

190. Eduardo Fradkin, Enrique Moreno and Fidel A. Schaposnik, *Bosonization of fermions coupled to topologically massive gravity*, Phys. Lett. B **730**, 284 (2014), http://dx.doi.org/10.1016/j.physletb.2014.01.057; arXiv:1401.3018.

191. Shih-Chang Weng, Ruqing Xu, Ayman Said, Bogdan Leu, Hawoong Hong, Xinyue Fang, M. Y. Chou, A. Bosak, P. Abbamonte, S. L. Cooper, E. Fradkin, S. L. Chang, and T.-C. Chiang, *Pressure-induced antiferrodistortive phase transition in* $SrTiO_3$*: Common scaling of soft-mode with pressure and temperature*, Euro. Phys. Lett. **107**, 36006 (2014), doi:10.1209/0295-5075/107/36006.

192. Rodrigo Soto Garrido and Eduardo Fradkin, *Pair-Density-Wave Superconducting States and Electronic Liquid Crystal Phases*, Phys. Rev. B **89**, 165126 (2014), doi:10.1103/PhysRevB.89.165126; arXiv:1403.7530.

193. Gil Young Cho, Yizhi You and Eduardo Fradkin, *Geometry of Fractional Quantum Hall Fluids*, Phys. Rev. B **90**, 115139 (2014), doi: http://dx.doi.org/10.1103/PhysRevB.90.115139; arXiv:1406.2700.

194. Krishna Kumar, Kai Sun, and Eduardo Fradkin, *Chern-Simons theory for magnetization plateaus of the spin-$\frac{1}{2}$ XXZ quantum Heisenberg model on the kagome lattice*, Phys. Rev. B **90**, 174409 (2014), doi:http://dx.doi.org/10.1103/PhysR arXiv:1409.2171.

195. Eduardo Fradkin, Steven A. Kivelson, and John M. Tranquada, *Theory of Intertwined Orders in High Temperature Superconductors*, Rev. Mod. Phys. **87**, 457 (2015), doi:http://dx.doi.org/10.1103/RevModPhys.87.457; arXiv:1407.4480.

196. Gil Young Cho, Rodrigo Soto-Garrido and Eduardo Fradkin,*Topological Pair-Density-Wave Superconducting States*, Phys. Rev. Lett. **113**, 256405 (2014), doi:10.1103/PhysRevLett.113.256405; arXiv:1407:6358.

197. Yizhi You, Gil Young Cho and Eduardo Fradkin, *Theory of the Nematic Fractional Quantum Hall State*, Phys. Rev. X **4**, 041050 (2014), doi:10.1103/PhysRevX.4.041050; arXiv:1410.3390.

198. Andrey Gromov, Gil Young Cho, Yizhi You, Alexander G. Abanov, and Eduardo Fradkin, *Framing Anomaly in the Effective Theory of Fractional Quantum Hall Effect*, Phys. Rev. Lett. **114**, 016805 (2015) (Editor's suggestion), doi:http://dx.doi.org/10.1103/PhysRevLett.114.016805; arXiv:1410.6812.

199. Andrey Gromov, Gil Young Cho, Yizhi You, Alexander G. Abanov, and Eduardo Fradkin, *Erratum: Framing Anomaly in the Effective Theory of Fractional Quantum Hall Effect*, Phys. Rev. Lett. **114**, 149902 (2015), http://dx.doi.org/10.1103/PhysRevLett.114.149902; arXiv:1410.6812.

200. X. M. Chen, A. J. Miller, C. Nugroho, G. A. de la Peña, Y. I. Joe, A. Kogar, J. D. Brock, J. Geck, G. J. MacDougall, S. L. Cooper, E. Fradkin, D. J. Van Harlingen, P. Abbamonte, *Influence of Ti doping on the incommensurate charge density wave in 1T-TaS_2*, Phys. Rev. B **91**, 245113 (2015), doi: http://dx.doi.org/10.1103/PhysRevB.91.245113; arXiv:1411.6604.

201. Xiao Chen, Gil Young Cho, Thomas Faulkner, and Eduardo Fradkin, *Scaling of entanglement in $2+1$-dimensional scale-invariant field theories*, J. Stat. Mech.: Theor. Exp., **2015**, P02010 (2015), doi:10.1088/1742-5468/2015/02/P02010; arXiv:1412:3546.

202. Yu Gan, Gilberto de la Peña Muñoz, Anshul Kogar, Bruno Uchoa, Diego Casa, Thomas Gog, Eduardo Fradkin, and Peter Abbamonte, *Reexamination of the effective fine structure constant of graphene, as measured in graphite*, Phys. Rev. B **93**, 195150 (2016), doi:10.1103/PhysRevB.93.195150; arXiv:1501.06812.

203. S. L. Gleason, Y. Gim, T. Byrum, A. Kogar, P. Abbamonte, E. Fradkin, G. J. MacDougall, D. J. Van Harlingen, Xiangde Zhu, C. Petrovic, and S. L. Cooper, *Structural contributions to the pressure-tuned charge-density-wave to superconductor transition in ZrTe3: Raman scattering studies* , Phys. Rev. B **91**, 155124 (2015), http://dx.doi.org/10.1103/PhysRevB.91.155124; arXiv:1501.06871.

204. Kai Sun, Krishna Kumar, and Eduardo Fradkin, *A discretized Chern-Simons gauge theory on arbitrary graphs*, Phys. Rev. B **92**, 115148 (2015) (Editor's suggestion), http://dx.doi.org/10.1103/PhysRevB.92.115148; arXiv:1502.00641.

205. Rodrigo Soto-Garrido, Gil Young Cho and Eduardo Fradkin, *Quasi One Dimensional Pair Density Wave Superconducting State*, Phys. Rev. B **91**, 195102 (2015), http://dx.doi.org/10.1103/PhysRevB.91.195102; arXiv:1502.07349.

206. Jeffrey C. Y. Teo, Taylor L. Hughes, and Eduardo Fradkin, *Theory of Twist Liquids: Gauging and Anyonic Symmetry*, Ann. Phys (N.Y.) **360**, 349 (2015), doi: http://dx.doi.org/10.1016/j.aop.2015.05.012 ; arXiv:1503.06812.

207. Krishna Kumar, Kai Sun, and Eduardo Fradkin, *Chiral spin liquids on the kagome lattice*, Phys. Rev. B **92**, 094433 (2015), doi:10.1103/PhysRevB.92.094433; arXiv:1507.01278.

208. N. Samkharadze, K.A. Schreiber, G.C. Gardner, M.J. Manfra, E. Fradkin, and G.A. Csáthy, *Observation of a transition from a topologically ordered to a spontaneously broken symmetry phase*, Nature Physics **12**, 191 (2016); published online on 25 October, 2015, doi:10.1038/nphys3523; arXiv:1509.03658.

209. Xiao Chen, Xiongjie Yu, Gil Young Cho, Bryan K. Clark, and Eduardo Fradkin, *Many-body Localization Transition in Rokhsar-Kivelson-type wave functions*, Phys. Rev. B **92**, 212204 (2015), doi:10.1103/PhysRevB.92.214204; arXiv:1509.03890.

210. Sean Vig, Anshul Kogar, Vivek Mishra, Luc Venema, Melinda S. Rak, Ali A. Husain, Genda D. Gu, Eduardo Fradkin, Michael R. Norman, and Peter Abbamonte, *Low-energy bosonic modes in a high-temperature superconductor with incipient charge order*, submitted to Science (September 2015); arXiv:1509.04230.

211. AtMa P. O. Chan, Thomas Kvorning, Shinsei Ryu, and Eduardo Fradkin, *Effective hydrodynamic field theory and condensation picture of topological insulators*, Phys. Rev. B **93**, 155122 (2016), doi:http://dx.doi.org/10.1103/PhysRevB.93.1 arXiv:1510.08975.

212. Luiz H. Santos and Eduardo Fradkin, *Instanton effects in lattice models of bosonic symmetry-protected topological states*, Phys. Rev. B **93**, 15145 (2016), doi:http://dx.doi.org/10.1103/PhysRevB.93.155145; arXiv:1512.06864.

213. Yizhi You, Gil Young Cho, and Eduardo Fradkin, *Nematic quantum phase transition of composite Fermi liquids in half-filled Landau levels and their geometric response*, Phys. Rev. B **93**, 205401 (2016), doi:http://dx.doi.org/10.1103/PhysRe arXiv:1602.01482.

214. Yuxuan Wang, Gil Young Cho, Taylor L. Hughes, and Eduardo Fradkin, *Topological superconducting phases from inversion symmetry breaking order in spin-orbit-coupled systems*, Phys. Rev. B **93**, 134512 (2016), doi:http://dx.doi.org/10.1103/PhysRevB.93.134512; arXiv:1602.02778.

215. Peng Ye, Taylor L. Hughes, Joseph Maciejko, and Eduardo Fradkin, *Composite Particle Theory, Fractional Axion Angles, and Extrinsic Twist Defects in Three-Dimensional Gapped Fermionic Phases*, Phys. Rev. B **94**, 115104 (2016), doi:http://dx.doi.org/10.1103/PhysRevB.94.115104; arXiv:1603.02696.

216. Krishna Kumar, Hitesh Changlani, Bryan K. Clark, and Eduardo Fradkin, *Numerical evidence for a chiral spin liquid in the XXZ model on the kagome lattice at $m = \frac{2}{3}$ magnetization*, Phys. Rev. B **94**, 134410 (2016), doi:https://doi.org/10.1103/PhysRevB.94.134410; arXiv:1606.04103.

217. Tianci Zhou, Xiao Chen, Thomas Faulkner, Eduardo Fradkin, *Entanglement Entropy and Mutual Information of Circular Entangling Surfaces in 2 + 1-dimensional Quantum Lifshitz Model* , J. Stat. Mech.: Theor. Exp., **2016**, 093101 (2016), doi:http://dx.doi.org/10.1088/1742-5468/2016/09/093101; arXiv:1607.01771.

218. Shichao Yan, Davide Iaia, Emilia Morosan, Eduardo Fradkin, Peter Abbamonte, and Vidya Madhavan, *The influence of domain walls in the incommensurate charge density wave state of Cu intercalated 1T-$TiSe_2$*, submitted for publication to Physical Review Letters (September 2016); arXiv:1609.08249.

219. Xiao Chen, Tianci Zhou, David A. Huse, and Eduardo Fradkin, *Out-of-time-order correlations in many-body localized and thermal phases*, submitted to a special issue on Many Body Localization in Annalen der Physik (October 2016); arXiv:1610.00220.

220. Eduardo Fradkin, *Disorder Operators and their descendants*, Submitted to a special memorial issue for Leo Kadanoff of the Journal of Statistical Physics (October 2016); arXiv:1610.05780.

221. Xiao Chen, William Witczak-Krempa, Thomas Faulkner, and Eduardo Fradkin, *Two-cylinder entanglement entropy under a twist*, submitted to JSTAT (?) (October 2016); arXiv:1610.xxxxx.