

# Allan Peter Young

## List of Publications

June 2009

### Publications

1. Acoustic Anomalies in Jahn-Teller Coupled Systems (with R.J. Elliott and S.R.P. Smith), *J. Phys. C*, **4**, L317 (1971).
2. Brillouin Scattering, Ultrasonic and Theoretical Studies of Acoustic Anomalies in Crystals Showing Jahn-Teller Phase Transitions (with J.R. Sandercock et al.), *J. Phys. C*, **5**, 3126 (1972).
3. A theory for the Elastic Properties of Dysprosium Antimonide (with D.K. Ray), *J. Phys. C*, **6**, 3353 (1973).
4. The Pseudo-spin Model and its Application to KDP-type Materials (with R.J. Elliott), *Ferroelectrics*, **7**, 23 (1974).
5. Low Frequency Response of KDP-like Crystals in the Spin-phonon Model (with R.J. Elliott), *J. Phys. C*, **7**, 2721 (1974).
6. Excitations in Jahn-Teller Coupled System, Proceedings of 3rd International Conference on Light Scattering in Solids, M. Balkanski, ed., Flammarion, p. 817 (1975).
7. Resonance Errors and Partial Coherence in the Inelastic Scattering of Fast Electrons by Crystal Excitations (with P. Rez), *J. Phys. C*, **8**, L1 (1975).
8. Quantum Effects in the Renormalization Group Approach to Phase Transitions, *J. Phys. C*, **8**, L309 (1975).
9. The Effect of Planar Defects on Exchange Interactions in Ferromagnetic Metals (with J.P. Jakubovics), *J. Phys. F*, **5**, 1866 (1975).
10. Excitations in Jahn-Teller Coupled Systems with Complicated Electronic Level Schemes, *J. Phys. C*, **8**, 3158 (1975).
11. A Renormalization Group Approach to the Percolation Problem (with R.B. Stinchcombe), *J. Phys. C*, **8**, L535 (1975).
12. Back Scattering and the Production of X-rays in Thin Crystals (with P. Rez). Proceedings of the International Conference on Electron Microscopy, Bristol 1975, M. Venables, ed., p. 389 (1976).
13. Critical Behaviour of Dilute Magnetic Systems, an Exactly Soluble Model, *J. Phys. C*, **9**, 2103 (1976).
14. Real Space Renormalization Group Calculations for Spin Glasses and Dilute Magnets (with R.B. Stinchcombe), *J. Phys. C*, **9**, 4419 (1976).

15. Spherical Approximation to an Ising Spin Glass (with B.W. Southern), *J. Phys. C*, **10**, L79 (1977).
16. On the Lowering of Dimensionality in Phase Transitions with Random Fields, *J. Phys. C*, **10**, L257 (1977).
17. Real Space Renormalization Group Calculations for Spin Glasses. Proceedings of the Second International Symposium on Amorphous Magnetism, R.A. Levy and R. Hasegawa, eds., Plenum Press, p. 145 (1977).
18. Real Space Rescaling Study of Spin Glass Behaviour in Three Dimensions (with B.W. Southern), *J. Phys. C*, **10**, 2179 (1977).
19. On Correlations at Long Times in Heisenberg Paramagnets (with H.C. Fogedby), *J. Phys. C*, **11**, 527 (1978).
20. Spin Anisotropy and Crossover in the Potts Model (with D.J. Wallace), *Phys. Rev. B*, **17**, 2384 (1978).
21. On the Theory of the Phase Transition in the Two Dimensional Planar Spin Model, *J. Phys. C*, **11**, L453 (1978).
22. Melting and the Vector Coulomb Gas in Two Dimensions, *Phys. Rev. B*, **19**, 1855 (1979).
23. Critical Behaviour of a Two-dimensional Bonded Lattice Model (with D.A. Lavis), *J. Phys. A*, **12**, 229 (1979).
24. Effects of Percolation on Spin Glass Order (with B.W. Southern and P. Pfeuty), *J. Phys. C*, **12**, 683 (1979).
25. Fluctuation Effects in Spin Glasses, *J. Appl. Phys.*, **50**, 3 (1979). Invited review paper presented at the 3M meeting, Cleveland, November 1978.
26. "Phase Transitions in Low-Dimensional Systems and Renormalization Group Theory" and "The Kosterlitz-Thouless Theory of Two-Dimensional Melting." Invited lectures at the NATO Advanced Study Institute on "Ordering in Strongly Fluctuating Condensed Matter Systems." NATO Advanced Study Institute Series No. 50, T. Riste ed., Plenum Press (1980), p.11-29 and 271-283.
27. The Kikuchi Approximation: a Reformulation and Application to the Percolation Problem, *J. Phys. A*, **14**, 873 (1981).
28. The Paramagnetic Phase of B.C.C. Iron (with S. Shastry and D.M. Edwards), *J. Phys. C*, **14**, L665 (1981).
29. Crossover in the Two-dimensional Coulomb Gas (with T. Bohr), *J. Phys. C*, **14**, 2713 (1981).
30. Ordering in the infinite range Ising spin glass (with S. Kirkpatrick). Paper presented at the 3M meeting, Dallas, November 1980, *J. Appl. Phys.*, **52**, 1712 (1981).

31. Low Temperature Series Expansions for the FCC Ising Antiferromagnet (with N.D. Mackenzie), *J. Phys. C*, **14**, 3927 (1981).
32. The TAP Equations Revisited: a Qualitative Picture of the Sk Spin Glass Model, *J. Phys. C*, **14**, L1085 (1981).
33. Low-temperature Behavior of the Infinite-Range Ising Spin Glass: Exact Statistical Mechanics for Small Samples (with S. Kirkpatrick), *Phys. Rev. B*, **25**, 440 (1982).
34. Lectures at 1981 Scottish University Summer School. Lectures on “Renormalization Group Theory and Magnetic Phase Transitions” in “Magnetism in Solids”, Proceedings of the 22nd Scottish Universities Summer School in Physics (A.P. Cracknell and R.A. Vaughan eds.). (SUSSP publications), p. 393.
35. Lack of Ergodicity in the Infinite-Range Ising Spin Glass (with N.D. Mackenzie), *Phys. Rev. Lett.*, **49**, 301 (1982).
36. On the Ground State of the Infinite-Range Ising Spin Glass (with S. Kirkpatrick), *J. Phys. A*, **15**, L1165 (1982).
37. Theory of the Spin Dynamics of Paramagnetic EuO and EuS (with B. Shastri), *J. Phys. C*, **15**, 4547 (1982).
38. Weighted Averages and Order Parameters for the Infinite Range Spin Glass (with C. de Dominicis), *J. Phys. A*, **16**, 2063 (1983).
39. Spontaneous Symmetry Breaking in Spin-Glasses (with S. Jain), *J. Phys. A*, **16**, L199 (1983).
40. Static and Dynamics of a Two Dimensional Spin-Glass Model, *Phys. Rev. Lett.*, **50**, 917 (1983).
41. Role of Initial Conditions in Spin Glass Dynamics and Significance of Parisi’s  $q(x)$  (with A. Houghton and S. Jain), *J. Phys. C*, **16**, L375 (1983).
42. Order Parameter of the Spin Glass Mean Field Theory and Initial Conditions (with C. de Dominicis), *J. Phys. C*, **16**, L641 (1983).
43. Statics and Dynamics of the Infinite Range Ising Spin Glass Model (with N.D. Mackenzie), *J. Phys. C*, **16**, 5321 (1983).
44. Role of Initial Conditions in the Mean Field Theory of Spin Glass Dynamics (with S. Jain and A. Houghton), *Phys. Rev. B*, **28**, 2630 (1983).
45. “Spin Glasses; Recent Theoretical Developments”, Invited lectures presented at the NATO Advanced Study Institute on Multicritical Phenomena, NATO Advanced Study Institute Series, Plenum, 383 (1984).
46. Numerical Studies of Spin Glasses, in the Proceedings of the Heidelberg Symposium on Spin Glasses, I. Morgenstern and L. van Hemmen, eds., Springer. 328 (1983).

47. Spin Glasses, invited paper for Stat. Phys. XV, Edinburgh 1983 *J. Stat. Phys.*, **34**, 871 (1984).
48. Direct Determination of the Probability Distribution for the Spin Glass Order Parameter, *Phys. Rev. Lett.*, **51**, 1206 (1983).
49. Logarithmic Dynamic Scaling in Spin Glasses (with K. Binder), *Phys. Rev. B*, **29**, 2864 (1984).
50. Lack of Self-Averaging in Spin Glasses (with A.J. Bray and M.A. Moore), *J. Phys. C*, **17**, L149 (1984).
51. Weighted Averages of TAP Solutions and Parisi's  $q(x)$  (with A.J. Bray and M.A. Moore), *J. Phys. C*, **17**, L155 (1984).
52. Finite Size Tests of Hyperscaling (with K. Binder, V. Privman and M. Nauenberg), *Phys. Rev. B*, **31**, 1498 (1985).
53. Monte Carlo Studies of Short Range Ising Spin Glasses in Zero Field, *J. Phys. C*, **18**, L517 (1984).
54. Search for a Transition in the Three-Dimensional Ising  $\pm J$  Spin-Glass (with R. Bhatt), *Phys. Rev. Lett.*, **54**, 924 (1985).
55. Numerical Simulations of Spin Glasses, *J. Appl. Phys.*, **57**, 3361 (1985). (Invited talk at the Annual Conference on Magnetism and Magnetic Materials, San Diego, November 1984).
56. Quasi-Critical Behavior and First Order Transition in the  $d = 3$  Random Field Ising Model (with M. Nauenberg), *Phys. Rev. Lett.*, **54**, 2429 (1985).
57. Spin Glasses: A Comparison of Theory with Experiment (with R. Bhatt), invited paper for ICM '85, San Francisco, *J. Magn. and Magn. Mat.*, **54-57**, 6 (1986).
58. Long Range Ising Spin Glasses: Critical Behavior and Ultrametricity (with R. Bhatt) contributed paper for ICM '85, San Francisco, *J. Magn. and Magn. Mat.*, **54-57**, 191 (1986).
59. Numerical Simulations of the  $d = 3$  Random Field Ising Model (with M. Nauenberg), contributed paper for ICM '85, San Francisco, *J. Magn. and Magn. Mat.*, **54-57**, 63 (1986).
60. Monte Carlo Simulations of XY Spin-Glasses (with S. Jain), *J. Phys. C*, **19**, 3913 (1986).
61. The Lower Critical Dimension of Metallic Vector Spin Glasses (with A.J. Bray and M.A. Moore), *Phys. Rev. Lett.*, **56**, 2641 (1986).
62. Monte Carlo Simulations on the Distributed Array Processor. Proceedings of Workshop on "Scientific Applications and Algorithm Design for High Speed Computing", Urbana, 1986.

63. Spin Glasses: Experimental Facts, Theoretical Concepts and Open Questions (with K. Binder), *Rev. Mod. Phys.*, **58**, 801 (1986).
64. A Computer Simulation of the Three Dimensional Short Range Heisenberg Spin Glass (with A. Olive and D. Sherrington), *Phys. Rev. B*, **34**, 6341 (1986).
65. Summability of Perturbation Expansion in Disordered Systems: Results for a Toy Model (with A.J. Bray, T. McCarthy, M.A. Moore and J.D. Reger), *Phys. Rev. B*, **36**, 2212 (1987).
66. Numerical Studies of Spin Glasses (with R. Bhatt) in “Heidelberg Colloquium on Glassy Dynamics”, edited by J.L. van Hemmen and I. Morgenstern, (Springer, Berlin, 1987), p. 215.
67. The Shape of Two-Dimensional Percolation and Ising Clusters (with S. Quandt), *J. Phys. A*, **20**, 1851 (1987).
68. Numerical Studies of Ising Spin Glasses in two, three and four dimensions (with R.N. Bhatt), *Phys. Rev. B*, **37**, 5606 (1988).
69. Computer Simulation of the Heisenberg Spin Glass with Ruderman- Kittel-Kasuya-Yosida-like coupling (with J.D. Reger), *Phys. Rev. B*, **37**, 5493 (1988).
70. The Nature of Attractions in on A symmetric Spin Glass with Deterministic Dynamics (with H. Gutfreund and J.D. Reger), *J. Phys. A*, **21**, 2775 (1988).
71. Lack of Reentrant behavior in Certain Ising Spin Glass Models (with J.D. Reger), *J. Phys. Cond. Matt.*, **1**, 915 (1989).
72. Ultrametricity in the Infinite Ranged Ising Spin Glass (with R.N. Bhatt), *J. Phys. Cond. Matt.*, **1**, 2997 (1989).
73. Non-equilibrium Correlation in the Infinite Range Ising Spin Glass (with R.N. Bhatt), *J. Phys. C*, **21**, L57 (1988).
74. Monte Carlo Simulations of the Spin-1/2 Heisenberg Antiferromagnet on a Square Lattice (with J.D. Reger), *Phys. Rev. B*, **37**, 5978 (1988).
75. Monte Carlo Simulations of the Spin-1/2 Heisenberg Antiferromagnet in Two Dimensions (with J.D. Reger and J.A. Riera), *J. Phys. Cond. Matt.*, **1**, 1855 (1989).
76. Binding of Holes in One-Band Models of Oxide Superconductors (with J.A. Riera), *Phys. Rev. B*, **39**, 9697 (1989).
77. Ferromagnetism in the one-band Hubbard Model (with J.A. Riera), *Phys. Rev. B*, **40**, 5285 (1989).
78. Spontaneously Anisotropic Spin-Glass Order: the Four-State Clock and XY Models (with F.D. Nobre and D. Sherrington), *J. Phys. A*, **22**, 2835 (1989). 2835 (1989).

79. Simulations of Spin Glass Systems. In “Finite Size Scaling and Numerical Simulation of Statistical Systems”, V. Privman, ed., World Scientific, p465 (1990).
80. Spin Glasses. In “Proceedings of the Sir Roger Elliott 60th Birthday Symposium”, J. Taguena and J.A. Blackman, eds., Oxford University Press, p331 (1991).
81. Stability of the Saturated Ferromagnetic State in the one-band Hubbard Model (with A. Barbieri and J.A. Riera), *Phys. Rev. B*, **41**, 11697 (1990).
82. A Monte Carlo study of the Order Parameter Distribution in the Four-Dimensional Spin Ising Glass (with J.D. Reger and R.N. Bhatt), *Phys. Rev. Lett.*, **64**, 1859 (1990).
83. Finite-Size scaling study of the simple cubic three-state Potts Glass: is  $d=3$  the lower critical dimension? (with M. Scheucher, J.D. Reger and K. Binder), *Phys. Rev. B*, **42**, 6881 (1990).
84. A New Method for studying the dynamics of Spin Glasses (with R.N. Bhatt), *Europhys. Lett.*, **20**, 59 (1992).
85. The Correlation Length of the Biquadratic Spin-1 Chain, (with E.S. Sorensen), *Phys. Rev. B*, **42**, 754 (1990).
86. Dynamical Pair Susceptibilities in the t-J and Hubbard Models, (with E. Dagotto and J.A. Riera), *Phys. Rev. B*, **42**, 2347 (1990).
87. Ferromagnetic phase transitions in the one-band Hubbard model (with A. Barbieri), *J. Phys. Cond. Matt.*, **3**, 1801 (1991).
88. Finite size scaling study of the simple cubic three state Potts glass (with M. Scheucher, J. D. Reger and K. Binder), in “Computer Simulations on Condensed Matter Physics III”, ed. D. P. Landau, K. H. Mon and H.-B. Schuttler, Springer Verlag, Berlin, p172 (1991).
89. Evidence for a disordered ground state in the Potts glass with Gaussian couplings (with M. Scheucher, J. D. Reger and K. Binder), *Europhys. Lett.*, **14**, 119 (1991).
90. Vortex variable range hopping resistivity in superconducting films (with T. A. Tokuyasu and M. P. A. Fisher), *Phys. Rev. Lett.*, **22**, 2931 (1991).
91. On the lower critical dimension of the XY spin glass (with M. Schwartz), *Europhys. Lett.*, **15**, 209 (1991).
92. The universal conductivity of two-dimensional films at the superconductor-insulator transition (with M.-C. Cha, M. P. A. Fisher, S. M. Girvin and M. Wallin), *Phys. Rev. B*, **44**, 6883 (1991).
93. Spin Glasses, Orientational Glasses, and Random Field Systems, (with K. Binder and J. D. Reger) in “Monte Carlo Methods in Statistical Methods”, p 356. ed K. Binder, Springer (Berlin) (1992).

94. The four-dimensional Ising spin glass: A Monte Carlo Study (with J. D. Reger and R. N. Bhatt), *J. Appl Phys.*, **69**, 5219 (1991).
95. The random field Ising model (with D. P. Belanger), *J. Magn. and Magn. Mat.*, **100**, 272 (1991).
96. Numerical methods for quantum spin systems. Lectures given at the Les Houches school on “Strongly interacting fermi systems”, August 1991, B. Douçot and J. Zinn-Justin, Eds., Elsevier (1995!).
97. Vortex glass transition in three dimensions (with J. D. Reger, T. A. Tokuyasu, A. P. Young and M. P. A. Fisher), *Phys. Rev. B*, **44**, 7147 (1991).
98. Universal conductivity at the superconductor insulator transition in two dimensions (with S. M. Girvin, M. Wallin, M.-C. Cha and M. P. A. Fisher), *Prog. Theo. Phys. Suppl. N*, **107**, 135 (1992).
99. Universal conductivity of dirty bosons in two dimensions (with S. M. Girvin, M. Wallin and E. S. Sorensen) Proceedings of Nobel 90th Symposium, *Physica Scripta*, **T42**, 96 (1992).
100. Spin Glasses: Results from Numerical Simulations, invited talk at the 6th Nishinomiya-Yukawa Memorial Symposium, Nishinomiya, Japan, October 1991, Springer, Proceedings in Physics 70, S. Miyashita, M. Imada and H. Takayama eds., p. 205. Springer (Berlin, Heidelberg, New York) (1992).
101. Replica symmetry breaking in the random field Ising model (with M. Mézard), *Europhys. Lett.*, **18**, 653 (1992).
102. Universal Conductivity of Dirty Bosons at the Superconductor-Insulator Transition (with E. S. Sorensen, M. Wallin and S. M. Girvin), *Phys. Rev. Lett.*, **69**, 828 (1992).
103. The Ground State of the 2-Dimensional Potts Glass (with M. Scheucher and J. D. Reger), *Europhys. Lett.*, **20**, 343 (1992). *Europhys. Lett.* 20 343 (1992).
104. Monte Carlo Study of the Six-Dimensional Ising Spin Glass (with J. Wang), *J. Phys. A*, **25**, 1063 (1993).
105. Comment on “Ordering Temperature of the Infinite Range Ising Spin Glass” (with R. N. Bhatt), *Phys. Rev. Lett.*, **69**, 3130 (1992).
106. Real Space Renormalization Group Approach to the Random Field Ising Model (with I. Dayan and M. Schwartz), *J. Phys. A*, **26**, 3093 (1993).
107. Critical Exponents of the Three Dimensional Random Field Ising Model (with H. Rieger), *J. Phys. A*, **26**, 5279 (1993).
108. The Vortex Glass, invited talk at the Ray Orbach Inauguration Symposium, Riverside, March 19-20 1993. Published in “Random Magnetism, High-Temperature Superconductivity”, W.P. Beyermann, N.L. Huang-Liu and D.E. MacLaughlin eds., p. 113, World Scientific (Singapore) 1994.

109. Monte Carlo study of a vortex glass model (with J. D. Reger), *J. Phys. A*, **26**, L1067 (1993).
110. Finite temperature properties of the spin-1/2 Heisenberg Antiferromagnet on the triangular Lattice (with N. Elstner and R. R. P. Singh), *Phys. Rev. Lett.*, **71**, 1629 (1993).
111. Spin Stiffness in Frustrated Antiferromagnets, (with B. W. Southern), *Phys. Rev. B*, **48**, 13170 (1993).
112. The Superconductor-to-Insulator Transition in 2d Dirty Boson Systems (with M. Wallin, E. Sorensen and S. M. Girvin), *Phys. Rev. B*, **49**, 12115 (1994).
113. Bosons in a random potential, lectures at the International Summer School in Fundamental Problems in Statistical Physics VIII, Altenberg, July 1993. Published in “Fundamental Problems in Statistical Mechanics VIII”, H. van Beijeren and M.H. Ernst eds., p. 27, Elsevier (Amsterdam) (1994).
114. Two Dimensional Superfluids, Lectures at the Summer School on Vortices in Superfluids, Cargese July 1993. Published in “The Vortex State”, N. Bontemps, Y. Bruynseraede, G. Deutscher, and A. Kapitulnik eds., p. 63, Kluwer (Dordrecht, Boston) (1994).
115. Spin-1/2 Heisenberg Antiferromagnet on the Square and Triangular Lattices: A Comparison of Finite Temperature Properties, (with N. Elstner and R. R. P. Singh) paper for the MMM conference, Minneapolis, November 15-18 1993, *J. Appl. Phys.*, **75**, 5943 (1994).
116. Zero Temperature Quantum Phase Transition of a Two-Dimensional Ising Spin Glass (with H. Rieger), *Phys. Rev. Lett.*, **72**, 4141 (1994).
117. Spin-1/2 Heisenberg antiferromagnet on the Kagome Lattice: High-temperature expansion and exact-diagonalization studies (with N. Elstner), *Phys. Rev. B*, **50**, 6871 (1994).
118. Current-Voltage Characteristics of Two-Dimensional Vortex Glass Models (with R.A. Hyman, M. Wallin, M.P.A. Fisher, and S.M. Girvin), *Phys. Rev. B*, **51**, 15304 (1995).
119. Absence of a Phase Transition in a Three-Dimensional Vortex Glass Model with Screening (with H. Bokil), *Phys. Rev. Lett.*, **74**, 3021 (1995).
120. Quantum Phase Transitions, (Invited talk at LATTICE 94, Bielefeld, October 1994), *Nucl. Phys. B*, **42**, 201 (1995).
121. Phase Transitions in Random Systems, Invited lectures at the Summer School, Como, Italy, K. Binder and G. Ciccotti Eds., Conference Proceedings, Vol. 49, p. 285, Italian Physical Society, (Bologna, 1996).
122. Numerical Simulations of Quantum Phase Transitions, Invited Talk at StatPhys XV, Xi-amen, China, August 1995, “Statphys 19”, H. Bai-Lin Ed. World Scientific (Singapore, 1996).

123. Recent Developments in Ising Spin Glasses, (with N. Kawashima), Invited Talk at the US-Japan Bilateral Symposium on Computational Physics, Maui, August 1995, *Int. J. Mod. Phys. C*, **7**, 327 (1996).
124. Phase Transition in the Three-Dimensional  $\pm J$  Ising Spin Glass (with N. Kawashima), *Phys. Rev. B*, **53**, R484 (1996).
125. Quantum Spin Glasses in Finite Dimensions (with H. Rieger) “Coherent approach to fluctuations”, ed. M. Suzuki, N. Kawashima, p. 161 (World Scientific, Singapore, 1996).
126. A Numerical Study of the Random Transverse-Field-Ising Spin Chain (with H. Rieger), *Phys. Rev. B*, **53**, 8486 (1996).
127. A Study of Chirality in the two-dimensional XY Spin Glass (with H. Bokil) *J. Phys. A*, **29**, L89 (1996).
128. Griffiths Singularities in the Disordered Phase of a Quantum Ising Spin Glass (with H. Rieger) *Phys. Rev. B*, **54**, 3328 (1996).
129. Monte Carlo Study of a Three-Dimensional Vortex Glass Model with Screening (with C. Wengel) *Phys. Rev. B*, **54**, R6869 (1996).
130. Quantum Spin Glasses (with H. Rieger). Review article for XIV Sitges Conference: “Complex Behavior of Glassy Systems” (1996); published as Lecture Notes in Physics **492**, p. 256, ed. M. Rubi and C. Perez-Vicente, Springer-Verlag, Heidelberg, (1997).
131. Low temperature relaxational dynamics of the Ising chain in a transverse field (with S. Sachdev). *Phys. Rev. Lett.*, **78**, 2220 (1997).
132. Chaos in a two-dimensional Ising spin glass. (with M. Ney-Nifle) *J. Phys. A*, **30**, 5311 (1997).
133. A Common Universality Class for the Three-Dimensional Vortex Glass and Chiral Glass? (with Carsten Wengel) *Phys. Rev. B*, **56**, 5918 (1997).
134. Finite Temperature and Dynamical Properties of the Random Transverse-Field Ising Spin Chain, *Phys. Rev. B*, **56**, 11691 (1997).
135. Dynamical universality classes of the superconducting phase transition (with Jack Lidmar, Mats Wallin, Carsten Wengel and S.M. Girvin) *Phys. Rev. B*, **58**, 2827 (1998).
136. Critical Behavior of the Two-Dimensional Random Quantum Ising Ferromagnet (with C. Pich), arXiv:cond-mat/9802108.
137. Distributions of gaps and end-to-end correlations in random transverse-field Ising spin chains, (with Daniel S. Fisher) *Phys. Rev. B*, **58**, 9131 (1998).
138. The Random Transverse Field Ising Ferromagnet: the Simplest Disordered Model with a Quantum Phase Transition (with C. Pich), in “Computer Simulation Studies in Condensed Matter Physics, XI”, D.P. Landau and H.-B. Schüttler, p. 47, Springer (1999).

139. Dynamical Critical Properties of the Random Transverse-Field Ising Spin Chain (with J. Kisker) *Phys. Rev. B*, **58**, 14397 (1998).
140. Critical Behavior and Griffiths-McCoy Singularities in the Two-Dimensional Random Quantum Ising Ferromagnet (with C. Pich, H. Rieger, and N. Kawashima) *Phys. Rev. Lett.*, **81**, 5916 (1998).
141. Monte Carlo Study of the Critical Behavior of Random Bond Potts Models (with T. Olson) *Phys. Rev. B*, **60**, 3428 (1999)
142. Evidence for a Trivial Ground State Structure in the Two-Dimensional Ising Spin Glass (with Matteo Palassini) *Phys. Rev. B*, **60**, R9919 (1999).
143. Slow Dynamics at Quantum Phase Transitions. *Int. J. of Mod. Phys. C*, **10**, 1391 (1999).
144. Triviality of the Ground State Structure in Ising Spin Glasses (with Matteo Palassini) *Phys. Rev. Lett.*, **83**, 5126 (1999).
145. Ground State Structure of Spin Glasses (with Matteo Palassini) *J. Phys. Soc. Jpn.*, **69**, 165 (2000).
146. Finite Temperature Ordering in the Three-Dimensional Gauge Glass (with T. Olson) *Phys. Rev. B*, **61**, 12467 (2000).
147. Nature of the Spin Glass State (with Matteo Palassini) *Phys. Rev. Lett.*, **85**, 3017 (2000), (arXiv:cond-mat/0002134).
148. Reply to Comment on "Triviality of the Ground State Structure in Ising Spin Glasses" (with Matteo Palassini) *Phys. Rev. Lett.*, **85**, 3333 (2000), arXiv:cond-mat/0004485.
149. Monte Carlo Simulations of Spin Glasses at Low Temperatures (with Helmut G. Katzgraber and Matteo Palassini), *Phys. Rev. B*, **63**, 184422 (2001), arXiv:cond-mat/0007113.
150. Convergence of Monte Carlo Simulations to Equilibrium (with Onuttom Narayan), *Phys. Rev. E*, **64**, 021104 (2001), arXiv:cond-mat/0008046.
151. Quantum Phase Transitions in Random Magnets, Talk given at ICM2000, August 6-11, 2000, Recife Brazil, published in *J. Mag. Mag. Mat*, **226-230**, 556 (2001)
152. "Computer Science in Physics", in "Informatics - 10 Years Back, 10 Years Ahead", R. Wilhelm (Ed.), Springer (Berlin), p. 356. (arXiv:cond-mat/0010371).
153. The  $\pm J$  Spin Glass: Effects of Ground State Degeneracy, (with M. Palassini), *Phys. Rev. B*, **63**, 140408(R) (2001), arXiv:cond-mat/0012161.
154. Reply to Comment on "Nature of the Spin Glass State", with Matteo Palassini, arXiv:cond-mat/0012263.
155. "State Hierarchy Induced by Correlated Spin Domains in short range spin glasses" (with E. Domany, G. Hed, and M. Palassini), *Phys. Rev. B*, **64**, 224406 (2001), arXiv:cond-mat/0104281.

156. “The Nature of the Spin Glass State in the Three Dimensional Gauge Glass” (with H. G. Katzgraber), *Phys. Rev. B*, **63**, 184422 (2001), arXiv:cond-mat/0105077.
157. “Specific-Heat Exponent of Random-Field Systems via Ground-State Calculations” (with A. K. Hartmann), *Phys. Rev. B*, **64**, 214419 (2001), arXiv:cond-mat/0105310.
158. “Lower Critical Dimension of Ising Spin Glasses” (with A. K. Hartmann), *Phys. Rev. B*, **64**, 180404 (2001), arXiv:cond-mat/0107308.
159. “Spin Glasses: A Computational Challenge for the 21st Century”, Invited talk given at ”Challenges in Computational Statistical Physics in the 21st Century”, Athens, Georgia, July 23-25, 2001.
160. “Numerical Studies of Spin Glass Problems in Magnetism and Superconductivity”, in “Proceedings of the Second Regional Conference on Magnetic and Superconducting Materials, MSM-01”, S. Mahmood et al. Eds., *Physica*, **B 321**, 183 (2002).
161. “Monte Carlo Simulations of the Four Dimensional XY Spin-glass at Low Temperatures”, (with H. G. Katzgraber), *Phys. Rev. B*, **65**, 214401 (2002), arXiv:cond-mat/0108320.
162. “Monte Carlo Simulations of Spin-Glasses at Low-Temperatures: Effects of Free Boundary Conditions”, (with H. G. Katzgraber), *Phys. Rev. B*, **65**, 214402 (2002), arXiv:cond-mat/0108544.
163. “Critical Behavior and Lack of Self Averaging in the Dynamics of the Random Potts Model in Two Dimensions”, (with C. Deroulers), *Phys. Rev. B*, **66**, 14438 (2002), arXiv:cond-mat/0202135.
164. “Numerical Studies of the Two- and Three-Dimensional Gauge Glass at Low Temperature”, (with H. G. Katzgraber, *Phys. Rev. B*, **66**, 224507 (2002), arXiv:cond-mat/0205206.
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