

Lista delle Pubblicazioni di **Vincenzo Marinari**

1. *Computation of the Critical Exponents of Percolation*, F. Fucito and E. Marinari, J. Phys. A: Math. Gen. **14** (1981) L85;
2. *A Proposal for Monte Carlo Simulations of Fermionic Systems*, F. Fucito, E. Marinari, G. Parisi and C. Rebbi, Nucl. Phys. **B180** (1981) 369, reprinted in *Lattice Gauge Theories and Monte Carlo Simulation*, edited by C. Rebbi (World Scientific, Singapore 1983);
3. *A Stochastic Approach to Simulations of Fermionic Systems*, F. Fucito and E. Marinari, Nucl. Phys. **B190** (1981) 266;
4. *Complex Singularities in the Specific Heat of the $SU(2)$ Lattice Gauge Model*, M. Falcioni, E. Marinari, M. L.Paciello, G. Parisi and B. Taglienti, Phys. Lett. **102B** (1981) 270;
5. *On the Link between Strong and Weak Coupling Expansions for the $SU(2)$ Lattice Gauge Theory*, M. Falcioni, E. Marinari, M. L.Paciello, G. Parisi and B. Taglienti, Nucl. Phys. **B190** (1981) 782;
6. *Monte Carlo Simulation of the Massive Schwinger Model*, E. Marinari, G. Parisi and C. Rebbi, Nucl. Phys. **B190** (1981) 734, reprinted in *Lattice Gauge Theories and Monte Carlo Simulation*, edited by C. Rebbi (World Scientific, Singapore 1983);
7. *Phase Transition Analysis in Z_2 and $U(1)$ Lattice Gauge Theories*, M. Falcioni, E. Marinari, M. L.Paciello, G. Parisi and B. Taglienti, Phys. Lett. **105B** (1981) 51;
8. *Approach to Equilibrium in a Chain of Nonlinear Oscillators*, with F. Fucito, F. Marchesoni, G. Parisi, L. Peliti, S. Ruffo and A. Vulpiani, J. Physique **43** (1982) 707;
9. *Computer Estimates of Meson Masses in $SU(2)$ Lattice Gauge Theory*, with G. Parisi and C. Rebbi, Phys. Rev. Lett. **47** (1981) 1795, reprinted in *Lattice Gauge Theories and Monte Carlo Simulation*, edited by C. Rebbi (World Scientific, Singapore 1983);

10. *Complex Zeroes in the Partition Function of the 4 Dimensional SU(2) Lattice Gauge Model*, with M. Falcioni, M. L.Paciello, G. Parisi and B. Taglienti, Phys. Lett. **108B** (1982) 331;
11. *Spectroscopy in a Lattice Gauge Theory*, with H. Hamber, G. Parisi and C. Rebbi, Phys. Lett. **108B** (1982) 314, reprinted in *Lattice Gauge Theories and Monte Carlo Simulation*, edited by C. Rebbi (World Scientific, Singapore 1983);
12. *On the Masses of the Glueballs in Pure SU(2) Lattice Gauge Theory*, with M. Falcioni, M. L.Paciello, G. Parisi, F. Rapuano, B. Taglienti and Zhang Y-Cheng, Phys. Lett. **110B** (1982) 295, reprinted in *Lattice Gauge Theories and Monte Carlo Simulation*, edited by C. Rebbi (World Scientific, Singapore 1983);
13. *A New Method for Updating SU(N) Matrices in Computer Simulations of Gauge Theories*, with N. Cabibbo, Phys. Lett. **119B** (1982) 387;
14. *Large Distance Correlation Functions for an SU(2) Lattice Gauge Theory*, with M. Falcioni, M. L.Paciello, G. Parisi, B. Taglienti and Zhang Y-Cheng, Nucl. Phys. **B215** (1983) 265;.
15. *Random Walk in Random Environment and $\frac{1}{f}$ Noise*, with G. Parisi, D. Ruelle and P. Windey, Phys. Rev. Lett. **50** (1983) 1223;
16. *On the Interpretation of $\frac{1}{f}$ Noise*, with G. Parisi, D. Ruelle and P. Windey, Commun. Math. Phys. **89** (1983) 1;
17. *Pion Propagator in Quenched Lattice QCD*, with K. C. Bowler, G. S. Pawley, F. Rapuano and D. Wallace. Nucl. Phys. **B220** (1983) 137;
18. *Numerical Simulations of Quantum Chromodynamics*, with H. Hamber, G. Parisi and C. Rebbi, Phys. Lett. **124B** (1983) 99;
19. *Considerations on Numerical Analysis of QCD*, with H. Hamber, G. Parisi and C. Rebbi, Nucl. Phys. **B225** (1983) 475;
20. *Complex Analytic Structure of Variant Action SU(2) Lattice Gauge Theory in 4 Dimensions*, with H. Flyvbjerg, Phys. Lett. **132B** (1983) 385;

21. $\frac{1}{f}$ *Noise, Disorder and Dimensionality*, with G. Paladin, G. Parisi and A. Vulpiani, *J. Physique* **45** (1984) 657;
22. *Some Numerical Results about SU(2) and SU(3) Lattice Gauge Theories*, in the Proceedings of the XXI Conference *High Energy Physics* (Brighton, 1983);
23. *On the Numerical Computation of QCD Mass Spectrum: an Introduction*, *Acta Physica Polonica* **B15** (1984) 291;
24. *Universality and Scaling in Quenched SU(2) Hadronic Mass Spectrum*, with E. Rabinovici and P. Windey, *Phys. Lett.* **135B** (1984) 125;
25. *Complex Zeroes of the d = 3 Ising Model Finite Size Scaling and Critical Amplitudes*, *Nucl Phys.* **B235** (1984) 123, reprinted in *Finite Size Scaling*, edited by J. L. Cardy (Elsevier, New York 1988);
26. *Light Pseudoscalars and Symmetry Restoration in SU(2) Lattice QCD*, with A. Billoire, A. Morel and R. Lacaze, *Phys. Lett.* **136B** (1984) 418;
27. *On the Large Distance Exponentiation: a New Determination of the SU(2) String Tension*, with A. Billoire, *Phys. Lett.* **139B** (1984) 399;
28. *Simulating random surfaces*, with A. Billoire and D. J. Gross, *Phys. Lett.* **139B** (1984) 75;
29. *Kogut-Susskind and Wilson Fermions in the Quenched Approximation: a Monte Carlo Simulation*, with A. Billoire and R. Petronzio, *Nucl. Phys.* **B251** (1985) 141;
30. *Making the Most of Mean Field Perturbation Theory*, with H. Flyvbjerg, P. Mansfield and B. Soderberg, in the Proceedings of the XXII Conference *High Energy Physics* (Lipsia, 1984);
31. *Evidence for $\frac{1}{2}^+$ Baryonic States in the Numerical Analysis of Staggered QCD*, with A. Billoire, A. Morel and J. Rodriguez, *Phys. Lett.* **148B** (1984) 166;

32. *A Numerical Simulation of Quenched SU(2) Lattice Gauge Theory*, with A. Billoire, R. Lacaze and A. Morel, Nucl. Phys. **B251** (1985) 581;
33. *The Ape Project: a Computer for Lattice QCD*, with *The Ape Collaboration*, P. Bacilieri et al., Nota Interna n. 839, Dipartimento di Fisica, Universita' di Roma *La Sapienza* (Roma, december 1984);
34. *On Controlling the Systematic Errors in Lattice QCD via Pseudofermions*, with A. Billoire and Ph. de Forcrand, Nucl. Phys. **B270** (1986) 333;
35. *Proposal of a Computer for Lattice Calculations*, with *The Ape Collaboration*, P. Bacilieri et al., Preprint ROM2F/85/6, Dipartimento di Fisica, Universita' di Roma *Tor Vergata* (Roma, 1985);
36. *The Ape Project: a One Gigaflops Parallel Processor for Lattice Calculations*, with *The Ape Collaboration*, M. Albanese et al., in the Proceedings of the Conference *Computing in High Energy Physics* (Amsterdam, 1985);
37. *Computing the Hadronic Mass Spectrum. Eight is Better than One*, with A. Billoire and G. Parisi, Phys. Lett. **162B** (1985) 160;
38. *Il Progetto Ape: un Computer per la Fisica Teorica*, Notiziario Infn, 1.3 (Rome, July 1985).
39. *A Numerical Approach to the Theory of Strong Interactions*, in the Proceedings of the *XCVII Varenna International School of Physics Enrico Fermi, Molecular Dynamics Simulation of Statistical Mechanical Systems*, edited by G. Ciccotti and W. G. Hoover (North-Holland, Amsterdam 1986);
40. *The Goldstone Pion in SU(2) Lattice QCD at Low Quark Mass: Scaling and Finite Size Effects*, with A. Billoire, R. Lacaze and A. Morel, Nucl. Phys. **B271** (1986) 461;
41. *Oscillatore Armonico Quantistico*, in *Dizionario Scienze Fisiche*, Enciclopedia Treccani.

42. *The Ape Computer and Lattice Gauge Theories*, in the Proceedings of the Conference *Lattice Gauge Theory. A Challenge in Large-Scale Computing*, edited by B. Bunk, K. H. Mutter and K. Schilling (Plenum, New York 1986);
43. *Hadronic Spectroscopy in Lattice QCD with Dynamical Staggered Quark Loops*, with A. Billoire, Phys. Lett. **184B** (1987) 381;
44. *The Ape Computer: an Array Processor Optimized for Lattice Gauge Theory Simulations*, with *The Ape Collaboration*, M. Albanese et al., Comp. Phys. Comm. **45** (1987) 345;
45. *Numerical Simulation of Lattice Gauge Theories*, in the Proceedings of the Gif sur Yvette Summer School of Physics (IN2P3, Paris 1986);
46. *Glue Ball Masses and String Tension in Lattice QCD*, with *The Ape Collaboration*, M. Albanese et al., Phys. Lett. **192B** (1987) 163;
47. *The Lattice Strong Interactions: an Introduction*, in the Proceedings of the Varenna International School of Physics Enrico Fermi, *Frontiers and Borderlines in Many-Particle Physics* (1987);
48. *The Ape Computer: a Fast Array Processor*, with *The Ape Collaboration*, M. Albanese et al., Preprint ROM2F/87, Dipartimento di Fisica, Universita' di Roma *Tor Vergata* (Roma, 1987);
49. *Glue Ball Masses and the Loop-Loop Correlation Functions*, with *The Ape Collaboration*, M. Albanese et al., Phys. Lett. **197B** (1987) 400;
50. *Glue Ball Masses and String Tension: Smeared Loop-Loop Correlation Functions*, with A. L. Fernandez, Nucl. Phys. **B295** (1988) 51.
51. *Some News from the Ape*, Nucl. Phys. **B** (Proc. Suppl.) **4** (1988) 3.
52. *On the p -adic Five Point Function*, with G. Parisi, Phys. Lett. **203B** (1988) 52;
53. *Scaling in Lattice a.C.D.: Glue Ball Masses and String Tension*, with *The Ape Collaboration*, P. Bacilieri et al., Phys. Lett. **205B** (1988) 535;

54. *Eigenstates and Limit Cycles in the SK Model*, with S. Cabasino, P. Paolucci and G. Parisi, J. Phys. A (Math. Gen.) **21** (1988) 1;
55. *The Hadronic Mass Spectrum in Quenched Lattice QCD: Results at $\beta=5.7$ and $\beta=6.0$* , with *The Ape Collaboration*, P. Bacilieri et al., Phys. Lett. **214B** (1988) 115;
56. *APE: A Fast Array Processor for Physics Simulations*, with *The Ape Collaboration*, P. Bacilieri et al., in the Proceedings of the *Third International Conference on Supercomputing* (International Supercomputing Institute, Boston 1988);
57. *The Hadronic Mass Spectrum in Quenched Lattice QCD: $\beta=5.7$* , with *The Ape Collaboration*, P. Bacilieri et al., Nucl. Phys. **B317** (1989) 509;
58. *Order of the Deconfining Phase Transition in Pure-Gauge QCD*, with *The Ape Collaboration*, P. Bacilieri et al., Phys. Rev. Lett. **61** (1988) 1545;
59. *From APE to APE-100: Present and Future of the APE Project*, with *The Ape Collaboration*, P. Bacilieri et al., in the Proceedings of the *International Conference on the Impact of Digital Microelectronics and Microprocessors on Particle Physics* (Trieste, 1988);
60. *The Deconfining Phase Transition in Lattice Gauge SU(3)*, with *The Ape Collaboration*, P. Bacilieri et al., Nucl. Phys. **B318** (1989) 553;
61. *The 3d Z₃ Spin Model and the Deconfinement Transition in QCD: a Problem of Universality*, with A. Fernandez, G. Parisi, S. Roncolini and A. Tarancon, Phys. Lett. **217B** (1989) 309;
62. *The Hadronic Mass Spectrum and the Heavy Quark Potential in Quenched and Unquenched QCD*, plenary review talk given at the Conference *Lattice 88*, Nucl. Phys. **B** (Proc. Suppl.) **9** (1989) 209;
63. *On the Order of the Deconfining Phase Transition in SU(3) Lattice Gauge Theory*, with *The Ape Collaboration*, P. Bacilieri et al., Nucl. Phys. **B** (Proc. Suppl.) **9** (1989) 315;

64. *Three-Dimensional Visualization of Many-Body System Dynamics*, with M. Bernaschi, S. Patarnello and S. Succi, IBM J. Res. Develop. **35** (1991) 254;
65. *The Deconfining Phase Transition and the Glue Ball Channels in Pure Gauge QCD*, with *The Ape Collaboration*, P. Bacilieri et al., Phys. Lett. **220B** (1989) 607;
66. *A New Computation of the Correlation Length near the Deconfining Transition in $SU(3)$* , with *The Ape Collaboration*, P. Bacilieri et al., Phys. Lett. **224B** (1989) 333;
67. *Deconfinement in QCD: an Analysis of the Phase Transition*, Phys. Rep. **184** (1989) 131;
68. *Status of Quenched QCD on Ape Computers*, with *The Ape Collaboration*, S. Cabasino et al., Nucl. Phys. **B** (Proc. Suppl.) **16** (1990) 554;
69. *The Ape with a Small Jump*, with *The Ape Collaboration*, S. Cabasino et al., Nucl. Phys. **B** (Proc. Suppl.) **17** (1990) 218;
70. *The Ape with a Small Mass*, with *The Ape Collaboration*, S. Cabasino et al., Nucl. Phys. **B** (Proc. Suppl.) **17** (1990) 431;
71. *Staggered Fermions at $\beta = 5.7$: Smearred Operators on Large Lattices*, with *The Ape Collaboration*, P. Bacilieri et al., Nucl. Phys. **B343** (1990) 228;
72. *Cluster Algorithms for the Generalized 3d, 3q Potts Model*, with R. Marra, Nucl. Phys. **B342** (1990) 737;
73. *Scattering Lengths from Fluctuations*, with M. Guagnelli and G. Parisi, Phys. Lett. **B240** (1990) 188;
74. *System and Applicative Software for the APE Computer Family*, with *The Ape Collaboration*, P. Bacilieri et al., in the Proceedings of the A.I.C.A. Workshop (Bologna, 1989);

75. *From APE to APE-100: From 1 to 100 Gflops in Lattice Gauge Theory Simulations*, with *The Ape Collaboration*, N. Avico et al., *Comp. Phys. Comm.* **57** (1989) 285;
76. *A 100 Gigaflops Parallel Computer*, with *The Ape Collaboration*, N. Avico et al., Preprint n. 733, Dipartimento di Fisica, Universita' di Roma *La Sapienza* (Roma, April 1990);
77. *The Supersymmetric One-Dimensional String*, with G. Parisi, *Phys. Lett.* **B240** (1990) 375;
78. *A Non Perturbative Ambiguity Free Solution of a String Model*, with E. Brezin and G. Parisi, *Phys. Lett.* **242B** (1990) 35;
79. *A Non Perturbative Definition of 2d Quantum Gravity*, with G. Parisi, *Phys. Lett.* **247B** (1990) 537;
80. *A Finite Size Scaling Study of the Diamond 3d 3q Potts Model*, with M. Bernaschi, M. Guagnelli and S. Patarnello, *Nucl. Phys.* **B360** (1991) 283;
81. *Lattice 89*, Proceedings of the 1989 Capri Symposium on Lattice Field Theory, edited with N. Cabibbo, L. Maiani, G. Martinelli, G. Parisi, R. Petronzio and R. Pettorino, *Nucl. Phys.* **B** (Proc. Suppl.) **17** (1990);
82. *Gauge Fixing Ambiguities in SU(3) Lattice Gauge Theory*, with C. Parrinello and R. Ricci, *Nucl. Phys.* **B** (Proc. Suppl.) **20** (1991) 283;
83. *Evidence for the Existence of Gribov Copies in Landau Gauge Lattice QCD*, with C. Parrinello and R. Ricci, *Nucl. Phys.* **B362** (1991) 487;
84. $\beta = 6.0$ *Quenched Wilson Fermions*, with *The Ape Collaboration*, S. Cabasino et al., *Phys. Lett.* **258B** (1991) 195;
85. $\beta = 6.0$ *Staggered Quenched Fermions*, with *The Ape Collaboration*, S. Cabasino et al., *Phys. Lett.* **258B** (1991) 202;
86. *Ape Quenched Spectrum*, with *The Ape Collaboration*, S. Cabasino et al., *Nucl. Phys.* **B** (Proc. Suppl.) **20** (1991) 399;

87. *Random Surfaces and Quantum Gravity*, edited with O. Alvarez and P. Windey, (Plenum Press, New York 1991);
88. *Lattice Gauge Theories, the Ape Computers and the Hadronic Mass Spectrum*, in *Monte Carlo Methods in Theoretical Physics*, edited by S. Caracciolo and A. Fabrocini (ETS, Pisa, Italy 1991);
89. *Random Self-Interacting Chains: a Mechanism for Protein Folding*, with G. Iori and G. Parisi, *J. Phys. A: Math Gen.* **24** (1991) 5349;
90. *On Polymers with Long Range Repulsive Forces*, with G. Parisi, *Europhys. Lett.* **15** (1991) 721;
91. *A Multi-Grid Cluster Labeling Scheme*, with J. Apostolakis and Paul Coddington, *Europhys. Lett.* **17** (1992) 189;
92. *Statistical Mechanics of Heteropolymer Folding*, with G. Iori, G. Parisi and M. V. Struglia, *Physica* **A185** (1992) 98;
93. *The Quenched Mass Spectrum in Lattice QCD*, with M. Guagnelli, M. P. Lombardo, G. Parisi and G. Salina, *Nucl. Phys. B (Proc. Suppl.)* **26** (1992) 278;
94. *The Quenched Mass Spectrum in Lattice QCD on a 1 Gigafllops Computer* with M. Guagnelli, M. P. Lombardo, G. Parisi and G. Salina, *Nucl. Phys.* **B378** (1992) 616;
95. *Simulated Tempering: a New Monte Carlo Scheme*, with G. Parisi, *Europhys. Lett.* **19** (1992) 451;
96. *The Ape-100 Computer: (I) the Architecture*, with C. Battista, S. Cabasino, F. Marzano, P. S. Paolucci, J. Pech, F. Rapuano, R. Sarno, G. M. Todesco, M. Torelli, W. Tross, P. Vicini, N. Cabibbo, E. Marinari, G. Parisi, G. Salina, F. Del Prete, A. Lai, M. P. Lombardo and R. Tripiccione, *International Journal of High Speed Computing* **5** (1993) 637.
97. *Quantum Gravity, Random Geometry and Critical Phenomena* with Mark J. Bowick, Syracuse University preprint SU-4241-505, *Gen. Rel. Grav.* **24** (1992) 1209. 1992 Fourth Award for Essays from the *Gravity Research Foundation*.

98. *New SIMD Algorithms for Cluster Labeling on Parallel Computers* with J. Apostolakis and P. Coddington, *Int. J. Mod. Phys. C* **4** (1993) 749.
99. *Statistical Mechanics on Massively Parallel Computers: The Research at Npac*, with A. Middleton, *Parallel Computing News* **5** (1992) 21.
100. *On Heteropolymer Shape Dynamics*, with P. Pliszka, *Europhys. Lett.* **22** (1993) 167, preprint hep-lat/9207011.
101. *Non-Exponential Relaxation Time Scales in Disordered Systems: an Application to Protein Dynamics*, with G. Iori and G. Parisi, *Europhys. Lett.* **25** (1994) 491, preprint hep-lat/9208001.
102. *The Phase Diagram of Fluid Random Surfaces with Extrinsic Curvature*, with M. Bowick, P. Coddington, L. Han and G. Harris, *Nucl. Phys.* **B394** (1993) 791, preprint hep-lat/9209020.
103. *4D Simplicial Quantum Gravity with a Nontrivial Measure*, with B. Brüggmann, *Phys. Rev. Lett.* **70** (1993) 1908;
104. *The String Tension in Gauge Theories: a Suggestion for a New Measurement Method*, with M. L. Paciello, G. Parisi and B. Taglienti, *Phys. Lett.* **298B** (1993) 400;
105. *Maximal Mean Field Solutions in the Random Field Ising Model: the Pattern of the Symmetry Breaking*, with M. Guagnelli and G. Parisi, *J. Phys. A: Math. Gen.* **26** (1993) 5675;
106. *The Phase Structure of Strings with Extrinsic Curvature*, with M. Bowick, P. Coddington, L. Han and G. Harris, to be published in the Proceedings of the Erice Meeting *Strings, Quantum Gravity and Physics at the Planck Energy Scale* (June 1992), preprint hep-lat/9211058.
107. *Strings with Extrinsic Curvature: an Analysis of the Crossover Regime*, with M. Bowick, P. Coddington, L. Han and G. Harris, *Nucl. Phys. B* (Proc. Suppl.) **30** (1993) 795, preprint hep-lat/9211024.
108. *A Review Talk about Computers and Theoretical Physics*, *Nucl. Phys. B* (Proc. Suppl.) **30** (1993) 122;

109. *String Theory, Quantum Gravity and the Unification of the Fundamental Interactions*, edited with M. Bianchi, F. Fucito and A. Sagnotti (World Scientific, Singapore 1993).
110. *2d and 4d Random Manifolds: a Quest for Continuum Theories*, with M. Bowick, B. Brüggemann, P. Coddington, L. Han and G. Harris, in *String Theory, Quantum Gravity and the Unification of the Fundamental Interactions*, edited by M. Bianchi, F. Fucito, E. Marinari and A. Sagnotti (World Scientific, Singapore 1993), p. 52;
111. *Critical and Topological Properties of Cluster Boundaries in the 3d Ising Model*, with V. Dotsenko, G. Harris, E. Martinec, M. Picco and P. Windey, Phys. Rev. Lett. **71** (1993) 811;
112. *On Toy Ageing*, with G. Parisi, cond-mat/9308003, J. Phys. **A**: Math. Gen. **26** (1993) L1149;
113. *Fluid Random Surfaces with Extrinsic Curvature: II*, with K. Anagnostopoulos, M. Bowick, P. Coddington, M. Falcioni, L. Han and G. Harris, hep-th/9308091, Phys. Lett. **B317** (1993) 102.
114. *A New Automatic Simulated Annealing-type Global Optimization Scheme*, with M. Shore, P. Coddington, G. Fox and C. Wu, SCCS preprint (September 1993).
115. *Heteropolymer Folding on a APE-100 Supercomputer*, with G. Iori and G. Parisi, Int. J. Mod. Phys. **C4** (1993) 1333;
116. *On the 3d Ising Spin Glass*, with G. Parisi and F. Ritort, cond-mat/9310041, J. Phys. **A** (Math. Gen.) **27** (1994) 2687;
117. *Two Ising Models Coupled to 2-Dimensional Gravity*, with M. Bowick, M. Falcioni and G. Harris, hep-th/9310136, Nucl. Phys. **B419** (1994) 665;
118. *The Phenomenology of Strings and Clusters in the 3d Ising Model*, with V. Dotsenko, G. Harris, E. Martinec, M. Picco and P. Windey, proceedings of the 1993 Cargese Workshop;

119. *On Critical Slowing Down in DTRS* with M. Bowick, M. Falcioni and G. Harris, Phys. Lett. **B322** (1994) 316.
120. *Multiple Ising Models Coupled to 2-d Gravity: a CSD Analysis*, with M. Bowick, M. Falcioni and G. Harris, proceedings of the 1993 Dallas Lattice Conference;
121. *Some Numerical Results on the Block Spin Transformation for the 2d Ising Model at the Critical Point*, with G. Benfatto and E. Olivieri, J. Stat. Phys. **78** (1995) 731.
122. *Replica Field Theory for Deterministic Models : Binary Sequences with Low Autocorrelation*, with G. Parisi and F. Ritort, hep-th/9405148, J. Phys. **A: Math. Gen.** **27** (1994) 7615.
123. *Replica Field Theory for Deterministic Models (II): a Non-Random Spin Glass with Glassy Behavior*, with G. Parisi and F. Ritort, cond-mat/9406074, J. Phys. **A: Math. Gen.** **27** (1994) 7647.
124. *Physics Projects on APEmille*, with C. Allton et al., Dipartimento di Fisica, Università di Roma *La Sapienza* preprint (September 1994).
125. *The Fully Frustrated Hypercubic Model is Glassy and Aging at Large D* with G. Parisi and F. Ritort, cond-mat/9410089, J. Phys. **A: Math. Gen.** **28** (1995) 327.
126. *More on the Exponential Bound of Four Dimensional Simplicial Quantum Gravity*, with B. Brüggmann, hep-th/9411060, Phys. Lett. **B 349** (1995) 35.
127. *Tempering Dynamics and Relaxation Times in the 3D Ising Model*, with L. A. Fernandez and J. J. Ruiz-Lorenzo, cond-mat/9412020 (December 1994), Journal de Physique I (France) **5** (1995) 1247.
128. *Weighted Mean Field Theory for the Random Field Ising Model*, with D. Lancaster and G. Parisi, cond-mat/9412069, J. Phys. **A: Math Gen.** **28** (1995) 3959.
129. *Replica Theory and Large D Josephson Junction Hypercubic Models*, with G. Parisi and F. Ritort, cond-mat/9502067, J. Phys. **A (Math. Gen.)** **28** (1995) 4481.

130. *The String Tension in Gauge Theories*, with M. L. Paciello and B. Taglienti, hep-lat/9503027, Int. J. Mod. Phys. **A10** (1995) 4265.
131. *Monte Carlo Simulations of 4d Simplicial Quantum Gravity*, with B. Brüggmann, hep-lat/9504004, J. Math. Phys. **36** (1995) 6340 (contribution to the special issue of the Journal of Mathematical Physics on Quantum Geometry and Diffeomorphism-Invariant Quantum Field Theory, edited by Carlo Rovelli and Lee Smolin),
132. *How (Super) Rough is the Glassy Phase of a Crystalline Surface with a Disordered Substrate?*, with Remi Monasson and Juan Ruiz-Lorenzo, cond-mat/9503074, J. Phys. A: Math. Gen. **28** (1995) 3975.
133. *Self-Avoiding Surfaces in the 3-d Ising Model*, with V. S. Dotsenko, M. Picco, P. Windey, G. Harris and E. Martinec, hep-th/9504076, Nucl. Phys. B **448** (1995) 577.
134. *Series Expansion of the Off-Equilibrium Mode Coupling Equations*, with Silvio Franz and Giorgio Parisi, cond-mat/9506108, J. Phys. A: Math. Gen. **28** (1995) 5437.
135. *Numerical Evidence for Spontaneously Broken Replica Symmetry in 3D Spin Glasses*, with Giorgio Parisi, Felix Ritort and Juan Ruiz-Lorenzo, cond-mat/9508036, Phys. Rev. Lett **76** (1996) 843.
136. *Glue Ball Masses and the Chameleon Gauge*, with Maria Luigia Paciello, Giorgio Parisi and Bruno Taglienti, hep-lat/9511012, Phys. Lett. **B381** (1996) 479.
137. *Dynamic Behavior of Spin Glass Systems on Quenched ϕ^3 Graphs*, with Clivie Baillie, Des Johnston and Carla Naitza, cond-mat/9606194, J. Phys. **A** (Math. Gen.): **29** (1996) 6683.
138. *3d Spin Glasses: Numerical Evidence for a Mean Field Like Behavior at Low Temperature*, with G. Parisi, J. Ruiz-Lorenzo and F. Ritort, talk given at the 1995 Chia Meeting on *Common Trends in Condensed Matter and Particle Physics*, to be published.

139. *A Numerical Study of Ultrametricity in Finite Dimensional Spin Glasses*, with A. Cacciuto and G. Parisi, cond-mat/9608161, J. Phys. A: Math. Gen. **30** (1997) L263.
140. *Spin Glass Dynamics on Thin Graphs*, with Clivie Baillie, Des Johnston and Carla Naitza, to be published in the Proceedings of the Second Sakharov Conference, Moscow, may 1996 (World Scientific, Singapore 1996).
141. *On the Stability of the Mean-Field Spin Glass Broken Phase under Non-Hamiltonian Perturbations*, with Giulia Iori, cond-mat/9611106, J. Phys. A: Math. Gen. **30** (1997) 4489.
142. *Optimized Monte Carlo Methods*, in *Advances in Computer Simulation*, edited by J. Kertész and Imre Kondor (Springer-Verlag, Berlin 1998), p. 50, cond-mat/9612010.
143. *Numerical Simulations of Spin Glass Systems*, with Giorgio Parisi and Juan Ruiz-Lorenzo, in *Spin Glasses and Random Fields* edited by P. Young (World Scientific, Singapore 1998), p. 59, cond-mat/9701016.
144. *Ultrametric Structure of Finite Dimensional Spin Glasses*, with Angelo Cacciuto and Giorgio Parisi, in *Complex Behaviour of Glassy Systems*, edited by M. Rubí and C. Pérez-Vicente (Springer, Berlin 1997), p. 220.
145. *New Evidence for Super-Roughening in Crystalline Surfaces with Disordered Substrate*, with Barbara Coluzzi and Juan Ruiz-Lorenzo, cond-mat/9612144, J. Phys. A: Math. Gen. **30** (1997) 3771.
146. *4D Spin Glasses in Magnetic Field Have a Mean Field like Phase*, with G. Parisi and F. Zuliani, cond-mat/9703253, J. Phys. A: Math. Gen. **31** (1998) 1181.
147. *3D Spin Glass and 2D Ferromagnetic XY Model: a Comparison*, with David Iniguez, Giorgio Parisi and Juan Ruiz-Lorenzo, cond-mat/9707050, J. Phys. A: Math. Gen. **30** (1997) 7337.

148. *Numerical Simulations of the Dynamical Behavior of the SK Model*, with Davide Rossetti and Giorgio Parisi, cond-mat/9708025, Eur. Phys. J. B **2** (1998) 495.
149. *Numerical Simulations of Finite Dimensional Spin Glasses Show a Mean Field like Behavior*, cond-mat/9709165, in *XIIth International Congress of Mathematical Physics, ICMP '97*, edited by D. De Wit, A. J. Bracken, M. D. Gould and P. A. Pearce (International Press, Boston 1999), pp. 159-166.
150. *Violation of the Fluctuation Dissipation Theorem in Finite Dimensional Spin Glasses*, with G. Parisi, F. Ricci-Tersenghi and J. Ruiz-Lorenzo, cond-mat/9710120, J. Phys. A: Math. Gen. **31** (1998) 2611.
151. *Calcolatori Dedicati alla Fisica Teorica*, entry for the *Treccani Enciclopedia*, November 1997.
152. *Energy Constrained Sandpile Models*, with A. Chessa and A. Vespignani, cond-mat/9712127, Phys. Rev. Lett. **80** (1998) 4217.
153. *Off-Equilibrium Dynamics of a 4D Spin Glass with Asymmetric Couplings*, with D. Stariolo, cond-mat/9712106, J. Phys. A: Math. Gen. **31** (1998) 5021.
154. *Mean-Field Behavior of the Sandpile Model Below the Upper Critical Dimension*, with A. Chessa, A. Vespignani and S. Zapperi, cond-mat/9802123, Phys. Rev. E. **57** (1998) R6241.
155. *Critical Behavior of the 4D Spin Glass in Magnetic Field*, with C. Naitza and F. Zuliani, cond-mat/9802224, J. Phys. A: Math. Gen. **31** (1998) 6355.
156. *Phase Structure of the 3D Edwards Anderson Spin Glass*, with G. Parisi and J. J. Ruiz-Lorenzo, cond-mat/9802211, Phys. Rev. B. **58** (1998) 14852.
157. *A General Method to Determine Replica Symmetry Breaking Transitions*, with C. Naitza, G. Parisi, M. Picco, F. Ritort and F. Zuliani, cond-mat/9802309, Phys. Rev. Lett. **81** (1998) 1698.

158. *Replica Symmetry Breaking in Short Range Spin Glasses: a Review of the Theoretical Foundations and of the Numerical Evidence*, with G. Parisi, F. Ricci-Tersenghi, J. J. Ruiz-Lorenzo and F. Zuliani, cond-mat/9906076, J. Stat. Phys. **98** (2000) 973.
159. *Small Window Overlaps Are Effective Probes of Replica Symmetry Breaking in 3D Spin Glasses*, with G. Parisi, F. Ricci-Tersenghi and J. J. Ruiz-Lorenzo, cond-mat/9804017, J. Phys. A: Math. Gen. **31** (1998) L481.
160. *The Glassy Potts Model*, with S. Mossa and G. Parisi, cond-mat/9805300, Phys. Rev. B **59** (1999) 8401.
161. *Numerical Evidence for Continuity of Mean Field and Finite Dimensional Spin Glasses*, cond-mat/9807261, Phys. Rev. Lett. **82** (1999) 434.
162. *Reply to Bokil et al. Comment*, with C. Naitza, G. Parisi, M. Picco, F. Ritort and F. Zuliani, cond-mat/9811304, Phys. Rev. Lett. **82** (1999) 5175.
163. *Comment on “Evidence for the Droplet/Scaling Picture of Spin Glasses”*, with G. Parisi, J. J. Ruiz-Lorenzo and F. Zuliani, cond-mat/9812324, Phys. Rev. Lett. **82** (1999) 5176.
164. *Comment on “Ising Spin Glasses in a Magnetic Field”*, with G. Parisi and F. Zuliani, Phys. Rev. Lett. **84** (2000) 1056, cond-mat/9812401.
165. *Numerical Simulations of the 4D Edwards-Anderson Spin Glass with Binary Couplings*, with F. Zuliani, J. Phys. A: Math. Gen. **32** (1999) 7447, cond-mat/9904303.
166. *Comment on “Numerical Study on Aging Dynamics in the 3D Ising Spin Glass Model”*, with G. Parisi and J. J. Ruiz-Lorenzo, cond-mat/9904321 (April 1999).
167. *Off-Equilibrium Dynamics at Very Low Temperatures in 3d Spin Glasses*, with G. Parisi, F. Ricci-Tersenghi and J. J. Ruiz-Lorenzo, J. Phys. A: Math. Gen. **33** (2000) 2373, cond-mat/9910232.

168. *Evidences Against Temperature Chaos in Mean Field and Realistic Spin Glasses*, with A. Billoire, J. Phys. A: Math. Gen. **33** (2000) L265, cond-mat/9910352.
169. *Spin Glass Ordering in Diluted Magnetic Semiconductors: a Monte Carlo Study*, with V. Martin-Mayor and A. Pagnani, Phys. Rev. B **62** (2000) 4999, cond-mat/0002327.
170. *Comment on “Triviality of the Ground State Structure in Ising Spin Glasses”*, with G. Parisi, Phys. Rev. Lett. **85** (2000) 3332, cond-mat/0002457.
171. *On the Energy Minima of the SK Model*, with B. Coluzzi, G. Parisi and H. Rieger, J. Phys. A **33** (2000) 2851, cond-mat/0003287.
172. *On the Effects of Changing the Boundary Conditions on the Ground State of Ising Spin Glasses*, with G. Parisi, Phys. Rev. B **62** (2000) 11677, cond-mat/0005047.
173. *Critical Exponents of the KPZ Equation via Multi-Surface Coding Numerical Simulations*, with A. Pagnani and G. Parisi, J. Phys. A **33** (2000) 8181, cond-mat/0005105.
174. *On the Effects of a Bulk Perturbation on the Ground State of 3D Ising Spin Glasses*, with G. Parisi, Phys. Rev. Lett. **86** (2001) 3887, cond-mat/0007493.
175. *On the Use of Optimized Monte Carlo Methods for Studying Spin Glasses*, with G. Parisi, F. Ricci-Tersenghi and F. Zuliani, J. Phys. A **34** (2001) 383, cond-mat/0011039.
176. *Correlation Time Scales in the SK Model*, with A. Billoire, J. Phys. A **34** (2001) L727-L734, cond-mat/0101177.
177. *Droplet Motion for the Conservative 2D Ising Lattice Gas Dynamics below the Critical Temperature*, with G. Favrin and F. Martinelli, J. Phys. A **34** (2001) 5901-5910, cond-mat/0103197.
178. *Equilibrium Valleys in Spin Glasses at Low Temperature*, with O. Martin and F. Zuliani, Phys. Rev. B **64** (2001) 184413, cond-mat/0103534.

179. *Width Distributions and the Upper Critical Dimension of KPZ Interfaces*, with A. Pagnani, G. Parisi and Z. Rácz, Phys. Rev. E **65** (2002) 041919, cond-mat/0105158.
180. *A New Method to Compute the Configurational Entropy in Spin Glasses*, with B. Coluzzi, A. Crisanti, F. Ritort and A. Ruocco, Eur. Phys. J. B **32** (2003) 495-502, cond-mat/0105391.
181. *Zero-Temperature Responses of a 3D Spin Glass in a Field*, with F. Krzakala, J. Houdayer, O. Martin and G. Parisi, Phys. Rev. Lett. **87** (2001) 197204, cond-mat/0107366.
182. *Zero-Temperature Properties of RNA Secondary Structures*, with A. Pagnani and F. Ricci-Tersenghi, Phys. Rev. E **65** (2002) 041919, cond-mat/0111172.
183. *Overlap Among States at Different Temperatures in the SK Model*, with A. Billoire, Europhys. Lett. **60** (2002) 775, cond-mat/0202473.
184. *Low T Dynamical Properties of Spin Glasses Smoothly Extrapolate to $T = 0$* , with G. Parisi and J. J. Ruiz-Lorenzo, J. Phys. A **35** (2002) 6805, cond-mat/0203316.
185. *On the Tail of the Overlap Probability Distribution in the Sherrington-Kirkpatrick Model*, with A. Billoire and S. Franz, J. Phys. A **36** (2003) 15, cond-mat/0206224.
186. *The Eigenvalue Analysis of the Density Matrix of 4D Spin Glasses Supports Replica Symmetry Breaking*, with L. Correale and V. Martin-Mayor, Phys. Rev. B **66** (2002) 174400, cond-mat/0207460.
187. *I Ricercatori Eccellenti Non Visitano l'Italia*, Letter to *Il Nuovo Saggiatore* (2002, vol. 18, n. 1-2, section *Opinioni*), on line at <http://www.sif.it/nuovosag-it.shtml> (in italian).
188. *Localization of Denaturation Bubbles in Random DNA Sequences*, with T. Hwa, K. Sneppen and L-H Tang, Proc. Natl. Acad. Sc. **100** (2003) 4411-4416, cond-mat/0302603.

189. *L'Enigma Wolfram*, in *Galileo*, Year VII, Wed Nov 20, <http://www.galileonet.it/archiviop/scaffale.asp?id=4033> (online review in italian).
190. *A Quantitative Clustering Approach to Ultrametricity in Spin Glasses*, with S. Ciliberti, J. Stat. Phys. **115** (2004) 557-580, cond-mat/0304273.
191. *Scaling of Domain Wall Energies in Two Dimensional Ising Spin Glasses*, with C. Amoruso, O. Martin and A. Pagnani, Phys. Rev. Lett. **91** (2003) 087201, cond-mat/0305042.
192. *Statistical Physics of Disordered Systems: from Real Materials to Optimization and Codes*, with H. Nishimori and F. Ricci-Tersenghi, J. Phys. A **36** (2003).
193. *Critical Thermodynamics of the Two-Dimensional +/-J Ising Spin Glass*, with J. Lukic, A. Galluccio, O. C. Martin and G. Rinaldi, Phys. Rev. Lett. **92** (2004) 117202, cond-mat/0309238.
194. *A Topographic-Non-Topographic Paradigm for Glassy Dynamics*, with E. Pitard, Europhys. Lett. **69** (2005) 235, preprint cond-mat/0404214.
195. *Low T scaling in the binary 2d spin glass*, with J. Lukic and O. C. Martin, Biophys. Chem. **115** (2005) 109.
196. *Thermodynamics of 2d Ising spin glasses with binary couplings on large lattices using exact computations of partition functions*, with J. Lukic and O. C. Martin, Progress of Theoretical Physics Supplement **157** (2005) pp. 17-24. Proceedings of "Statistical Physics of Disordered Systems and Its Applications (SPDSA2004)", Sendai, Japan, 7/2004.
197. *Circuits in random graphs: from local trees to global loops*, with R. Monasson, J. Stat. Mech.: Theory and Experiment, P09004 (2004) 1, preprint cond-mat/0407253.
198. *Spatial correlation functions in 3-d Ising spin glasses*, with C. De Dominicis, I. Giardina, O. C. Martin and F. Zuliani, Phys. Rev. B **72** (2005) 014443, preprint cond-mat/0408088.

199. *Edwards-Anderson Spin Glasses Undergo Simple Cumulative Aging*, with A. Maiorano and F. Ricci-Tersenghi, Phys. Rev. B. **72** (2005) 104411, preprint cond-mat/0409577.
200. *The Mean Field Infinite Range $p = 3$ Spin Glass: Equilibrium Landscape and Correlation Time Scales*, with A. Billoire and L. Giomi, Europhys. Lett. **71** (2005) 824-830, preprint cond-mat/0501198.
201. *Un nuovo incontro: aspetti fondamentali di fisica e biologia*, in *Cent'anni di Relativita'*, in rete a http://www.treccani.it/site/Scuola/Zoom/scuola_zoom.htm, Enciclopedia Treccani, Italia, maggio 2005.
202. *Ianus: an adaptive FPGA computer*, with F. Belletti et al., Computing in Science and Engineering **8** (2006) 41. preprint cond-mat/0507270.
203. *Inferring DNA sequences from mechanical unzipping: an ideal-case study*, with V. Baldazzi, S. Cocco and R. Monasson, Phys. Rev. Lett. **96** (2006) 128102:1-128102:4, preprint cond-mat/0506221.
204. *An Algorithm for Counting Circuits: Application to Real World and Random Graphs*, with R. Monasson and G. Semerjian, Europhys. Lett. **73** (2006) 8-14, preprint cond-mat/0507525.
205. *Plaquette Disorder in Villain's Fully Frustrated Model: a Very Relevant Perturbation*, with J. Lukic and O. Martin, Europhys. Lett. **73** (2006) 779-785, preprint cond-mat/0507530.
206. *Ageing, Dynamical Heterogeneities and Crystallization in the Biroli-Mezard Model*, with V. Van Kerrebroeck, Europhys. Lett. **73** (2006) 383-389, preprint cond-mat/0510247.
207. *Modello, la necessita' della schematizzazione nel risolvere un problema*, in *Enciclopedia dei Ragazzi*, Istituto dell'Enciclopedia Italiana, novembre 2005.
208. *Strong universality and algebraic scaling in two-dimensional Ising spin glasses*, with T. Jörg, J. Lukic and O. C. Martin, Phys. Rev. Lett. **96** (2006) 237205, preprint cond-mat/0601480,

209. *Programmazione Scientifica*, with L. M. Barone, G. Organtini and F. Ricci-Tersenghi (Pearson Education, Milano, Italy 2006).
210. *On the number of circuits in random graphs*, E. Marinari and G. Semerjian, J. Stat. Mech. P06019 (2006), preprint [cond-mat/0603657](#).
211. *Inferring DNS sequences from mechanical unzipping data: the large-bandwidth case*, V. Baldazzi, S. Bradde, S. Cocco, E. Marinari and R. Monasson, Phys. Rev. E. **75** (2007) 011904:1-011904:34.
212. *Temperature Chaos in Two-Dimensional Ising Spin Glasses with Binary Couplings: a Further Case for Universality*, J. Lukic, E. Marinari, O. C. Martin and S. Sabatini, J. Stat. Mech. L10001 (2006) 1-11, preprint [cond-mat/0607325](#).
213. *Finding Long Cycles in Graphs*, E. Marinari, G. Semerjian and V. Van Kerrebroeck, Phys. Rev. E. **75** (2007) 066708:1-066708:11, preprint [cond-mat/0702261](#).
214. *Simulating spin systems on IANUS, an FPGA-based computer*, F. Belletti, M. Cotallo, A. Cruz, L. A. Fernández, A. Gordillo, A. Maiorano, F. Mantovani, E. Marinari, V. Martín-Mayor, A. Muñoz-Sudupe, D. Navarro, S. Pérez-Gaviro, J. J. Ruiz-Lorenzo, S. F. Schifano, D. Sciretti, A. Tarancón, R. Tripiccione, J. L. Velasco, Computer Physics Communications, **178** (2008) 208-216, preprint [arXiv:0704.3573](#).
215. *Zero-temperature behavior of the random-anisotropy model in the strong-anisotropy limit*, F. Liers, J. Lukic, E. Marinari, A. Pelissetto and E. Vicari, Phys. Rev. B **76** (2007) 174423:1-174423:7, preprint [arXiv:0707.1005](#).
216. *Cycles in Sparse Random Graphs*, E. Marinari and V. Van Kerrebroeck, Journal of Physics: Conference Series **95** (2008) 012014:1-012014:10.
217. *IANUS: an FPGA-based System for High Performance Scientific Computing*, F. Belletti, M. Cotallo, A. Cruz, L. A. Fernández, A. Gordillo, A. Maiorano, F. Mantovani, E. Marinari, V. Martín-Mayor, A. Muñoz-Sudupe, D. Navarro, S. Pérez-Gaviro, M. Rossi, J. J. Ruiz-Lorenzo,

- S. F. Schifano, D. Sciretti, A. Tarancón, R. Tripicciono and J. L. Velasco, *Computing in Science and Engineering* **11** (2009) 48-58. preprint [arXiv:0710.3535](#),
218. *Critical properties of the four-state Commutative Random Permutation Glassy Potts model in three and four dimensions*, L. A. Fernandez, A. Maiorano, E. Marinari, V. Martin-Mayor, D. Navarro, D. Sciretti, A. Tarancón and J. L. Velasco, *Phys. Rev. B.* **77** (2008) 104432:1-104432:9 preprint [arXiv:0710.4246](#).
219. *Finite size corrections in the Sherrington-Kirkpatrick model*, T. Aspelmeier, A. Billoire, E. Marinari and M. Moore, *J. Phys. A: Math. Theor.* **41** (2008) 324008:1-324008:7, preprint [arXiv:0711.3445](#).
220. *Ranking by loops: a new approach to categorization*, V. Van Kerrebroeck and E. Marinari, *Phys. Rev. Lett.* **101** (2008) 098701:1-098701:4, preprint [arXiv:0804.1436](#).
221. *Nonequilibrium Spin-Glass Dynamics from Picoseconds to a Tenth of a Second*, F. Belletti, E. Marinari et al., *Phys. Rev. Lett.* **101** (2008) 157201:1-157201:4, preprint [arXiv:0804.1471](#).
222. *An in-depth view of the microscopic dynamics of Ising spin glasses at fixed temperature*, F. Belletti, E. Marinari et al., *J. Stat. Phys.* **135** (2009) 1121, preprint [arXiv:0811.2864](#),
223. *Spin Glass Phase in the Four-State, Three-Dimensional Potts Model*, A. Cruz, E. Marinari et al., *Phys. Rev B* **79** (2009) 184408:1-184408:6, preprint [arXiv:0812.1287](#).
224. *Identifying essential genes in E. coli from a metabolic optimization principle*, C. Martelli, A. De Martino, E. Marinari, M. Marsili and I. Perez Castillo, *Proc. Natl. Acad. Sc.* **106** (2009) 2607-2611, preprint [arXiv:0902.1052](#),
225. *Optimal flux states, reaction replaceability and response to knockouts in the human red blood cell*, A. De Martino, D. Granata, E. Marinari, C. Martelli and V. Van Kerrebroeck, *Journal of Biomedicine and Biotechnology*, **2010** (2010) 415148:1-415148:10, preprint [arXiv:0907.2824](#),

226. *Intrinsic limitations of inverse inference in the pairwise Ising spin glass*, E. Marinari and V. Van Kerrebroeck, JSTAT (2010) P02008, preprint [arXiv:0911.1985](#),
227. *A Non-Disordered Glassy Model with a Tunable Interaction Range*, F. Liers, E. Marinari, U. Pagacz, F. Ricci-Tersenghi and V. Schmitz, J. Stat. Mech. (2010) L05003, preprint [arXiv:0911.0848](#),
228. *The solution space of metabolic networks: producibility, robustness and fluctuations*, A. De Martino and E. Marinari, J. Phys. Conf. Ser. **233** (2010) 012019:1-012019:11, preprint [arXiv:1002.0458](#),
229. *Critical Behavior of Three-Dimensional Disordered Potts Models with Many States*, R. Alvarez Banos, E. Marinari et al, J. Stat. Mech. (2010) P05002, preprint [arXiv:1002.4288](#).
230. *Nature of the spin-glass phase at experimental length scales*, R. Alvarez Banos, E. Marinari et al, J. Stat. Mech. (2010) P06026:1-P06026:46. preprint [arXiv:1003.2569](#),
231. *Static versus dynamic heterogeneities in the $D = 3$ Edwards-Anderson-Ising spin glass*, R. Alvarez Banos, E. Marinari et al, Phys. Rev. Lett. **105** (2010) 177202:1-177202:4, preprint [arXiv:1003.2943](#).
232. *Large random correlations in individual mean field spin glass samples*, A. Billoire, I. Kondor, J. Lukic and E. Marinari, J. Stat. Mech. (2011) P02009, preprint [arXiv:1010.3237](#).
233. *Computing fluxes and chemical potential distributions in biochemical networks: energy balance analysis of the human red blood cell*, Daniele De Martino, Matteo Figliuzzi, Andrea De Martino and Enzo Marinari, preprint [arXiv:1107.2330](#) (July 2011).
234. *Sample-to-sample fluctuations of the overlap distributions in the three-dimensional Edwards-Anderson spin glass*, The Janus Collaboration: R. Alvarez Baños, A. Cruz, L. A. Fernandez, J. M. Gil-Narvion, A. Gordillo-Guerrero, M. Guidetti, D. Iñiguez, A. Maiorano, F. Mantovani, E. Marinari, V. Martin-Mayor, J. Monforte-Garcia, A. Muñoz-Sudupe, D. Navarro, G. Parisi, S. Perez-Gaviro, F. Ricci-Tersenghi, J.

- J. Ruiz-Lorenzo, S. F. Schifano, B. Seoane, A. Tarancon, R. Tripicciono and D. Yllanes, Phys. Rev. B **84** (2011) 174209, preprint [arXiv:1107.5772](https://arxiv.org/abs/1107.5772).
235. *Finite-size scaling analysis of the distributions of pseudo-critical temperatures in spin glasses*, Alain Billoire, Luis Antonio Fernandez, Andrea Maiorano, Enzo Marinari, Victor Martin-Mayor and David Yllanes, J. Stat. Mech. (2011) P10019, preprint [arXiv:1108.1336](https://arxiv.org/abs/1108.1336).
236. *An overview of the Janus reconfigurable computer*, R. A. Baños, A. Cruz, L. A. Fernandez, J. M. Gil-Narvion, A. Gordillo-Guerrero, M. Guidetti, D. Iñiguez, A. Maiorano, F. Mantovani, E. Marinari, V. Martin-Mayor, J. Monforte-Garcia, A. Muñoz Sudupe, D. Navarro, G. Parisi, M. Pivanti, S. Perez-Gaviro, F. Ricci-Tersenghi, J. J. Ruiz-Lorenzo, S. F. Schifano, B. Seoane, A. Tarancon, R. Tripicciono and D. Yllanes, submitted to High Performance Reconfigurable Computing (November 2011).
237. *Thermodynamic glass transition in a spin glass without time-reversal symmetry*, R. A. Baños, A. Cruz, L.A. Fernandez, J. M. Gil-Narvion, A. Gordillo-Guerrero, M. Guidetti, D. Iñiguez, A. Maiorano, E. Marinari, V. Martin-Mayor, J. Monforte-Garcia, A. Muñoz Sudupe, D. Navarro, G. Parisi, S. Perez-Gaviro, J. J. Ruiz-Lorenzo, S.F. Schifano, B. Seoane, A. Tarancon, P. Tellez, R. Tripicciono, and D. Yllanes, Proc. Natl. Acad. Sci. USA **109** (2012) 6452-6456, preprint [arXiv:1202.5593](https://arxiv.org/abs/1202.5593).
238. *Correlated Domains in Spin Glasses*, Alain Billoire, Andrea Maiorano and Enzo Marinari, J. Stat. Mech. (2012) P12008, preprint [arXiv:1205.2759](https://arxiv.org/abs/1205.2759).
239. *Von Neumann's growth model: statistical mechanics and biological applications*, Andrea De Martino, Enzo Marinari and Andrea Romualdi, The European Physical Journal - Special Topics **212** (2012) 45-64, DOI: 10.1140/epjst/e2012-01653-8, preprint [arXiv:1205.2769](https://arxiv.org/abs/1205.2769)
240. *A Scalable Algorithm to Explore the Gibbs energy Landscape of Genome-scale Metabolic Networks*, D. De Martino, M. Figliuzzi, A. De Martino and E. Marinari, PLOS Comput. Biol. **8** (2012) e1002562, DOI:10.1371/journal.pcbi.1002562, preprint [arXiv:1206.5092](https://arxiv.org/abs/1206.5092).

241. *Energy metabolism and glutamate-glutamine cycle in the brain: a stoichiometric modeling perspective*, Francesco A. Massucci, Mauro Di Nuzzo, Federico Giove, Bruno Maraviglia, Isaac Perez Castillo, Enzo Marinari and Andrea De Martino, BMC Systems Biology 7 (2013) 103, preprint [arXiv:1310.6556](https://arxiv.org/abs/1310.6556).
242. *Reconfigurable computing for Monte Carlo simulations: results and prospects of the Janus project*, M. Baity-Jesi, R. A. Baños, A. Cruz, L. A. Fernandez, J. M. Gil-Narvion, A. Gordillo-Guerrero, M. Guidetti, D. Iniguez, A. Maiorano, F. Mantovani, E. Marinari, V. Martin-Mayor, J. Monforte-Garcia, A. Munoz Sudupe, D. Navarro, G. Parisi, M. Pivanti, S. Perez-Gaviro, F. Ricci-Tersenghi, J. J. Ruiz-Lorenzo, S. F. Schifano, B. Seoane, A. Tarancon, P. Tellez, R. Tripiccion, and D. Yllanes, The European Physical Journal - Special Topics 210 (2012) 33-51, DOI: 10.1140/epjst/e2012-01636-9, preprint [arXiv:1204.4134](https://arxiv.org/abs/1204.4134).
243. *MicroRNAs as a selective, post-transcriptional channel of communication between ceRNAs: a steady-state theory*, Matteo Figliuzzi, Enzo Marinari and Andrea De Martino, Biophysical Journal 104 (2013) 1203-1213, preprint [arXiv:1210.2338](https://arxiv.org/abs/1210.2338).
244. *A FPGA-based supercomputer for statistical physics: the weird case of Janus*, M. Baity-Jesi, R. A. Baños, A. Cruz, L. A. Fernandez, J. M. Gil-Narvion, A. Gordillo-Guerrero, M. Guidetti, D. Iniguez, A. Maiorano, F. Mantovani, E. Marinari, V. Martin-Mayor, J. Monforte-Garcia, D. Navarro, G. Parisi, M. Pivanti, S. Perez-Gaviro, F. Ricci-Tersenghi, J. J. Ruiz-Lorenzo, S. F. Schifano, B. Seoane, A. Tarancon, P. Tellez, R. Tripiccion and D. Yllanes, in *High-Performance Computing using FPGAs* edited by W. Vanderbauwhede and K. Benkrid, ISBN 978-1-4614-1790-3 (Springer, Berlin, Germany 2013), due: may 23, 2013.
245. *Janus2: a FPGA-based Supercomputer for Spin Glass Simulations*, M. Baity-Jesi, R. A. Baños, A. Cruz, L. A. Fernandez, J. M. Gil-Narvion, A. Gordillo-Guerrero, M. Guidetti, D. Iniguez, A. Maiorano, F. Mantovani, E. Marinari, V. Martin-Mayor, J. Monforte-Garcia, D. Navarro, G. Parisi, M. Pivanti, S. Perez-Gaviro, F. Ricci-Tersenghi, J. J. Ruiz-Lorenzo, S. F. Schifano, B. Seoane, A. Tarancon, P. Tellez,

- R. Tripiccione and D. Yllanes, accepted for publication in the ICS12 workshop proceedings (<http://hpc.pnl.gov/conf/ICS2012/>), June 2012
246. *Comment on "Evidence of Non-Mean-Field-Like Low-Temperature Behavior in the Edwards-Anderson Spin-Glass Model"*, A. Billoire, L. A. Fernandez, A. Maiorano, E. Marinari, V. Martin-Mayor, G. Parisi, F. Ricci-Tersenghi, J. J. Ruiz-Lorenzo and D. Yllanes, Phys. Rev. Lett. **110** (2013) 219701, preprint [arXiv:1211.0843](https://arxiv.org/abs/1211.0843).
 247. *Dynamical Transition in the $D = 3$ Edwards-Anderson spin glass in an external magnetic field*, M. Baity-Jesi, R. Alvarez Baños, A. Cruz, L.A. Fernandez, J. M. Gil-Narvion, Gordillo-Guerrero, D. Iñiguez, A. Maiorano, F. Mantovani, E. Marinari, V. Martin-Mayor, J. Monforte-Garcia, A. Muñoz Sudupe, D. Navarro, G. Parisi, S. Perez-Gaviro, M. Pivanti, J. J. Ruiz-Lorenzo, S.F. Schifano, B. Seoane, A. Tarancon, F. Ricci-Tersenghi, R. Tripiccione and D. Yllanes, Phys. Rev. E **89** (2014) 032140, preprint [arXiv:1307.4998](https://arxiv.org/abs/1307.4998).
 248. *The Janus project: boosting spin-glass simulations using FPGAs*, M. Baity-Jesi, R. A. Baños, A. Cruz, L. A. Fernandez, J. M. Gil-Narvion, A. Gordillo-Guerrero, D. Iñiguez, A. Maiorano, F. Mantovani, E. Marinari, V. Martin-Mayor, J. Monforte-Garcia, A. Muñoz Sudupe, D. Navarro, G. Parisi, S. Perez-Gaviro, M. Pivanti, F. Ricci-Tersenghi, J. J. Ruiz-Lorenzo, S. F. Schifano, B. Seoane, A. Tarancon, R. Tripiccione and D. Yllanes, published on-line in the proceedings of the PDeS2013 Conference, <http://pdes-conference.eu/> (September 2013).
 249. *Scientific Programming*, L. Barone, E. Marinari, G. Organtini and F. Ricci-Tersenghi (World Scientific, Singapore 2013).
 250. *Counting and correcting thermodynamically infeasible flux cycles in genome-scale metabolic networks*, Daniele De Martino, Fabrizio Capuani, Matteo Mori, Andrea De Martino, Enzo Marinari, Metabolites **2013** (2013) 946-966; doi:10.3390/metabo3040946, preprint [arXiv:1310.3693](https://arxiv.org/abs/1310.3693).
 251. *Janus II : a new generation application-driven computer for spin-system simulations*, Janus Collaboration: M. Baity-Jesi, R. Alvarez Baños, A. Cruz, L. A. Fernandez, J. M. Gil-Narvion, A. Gordillo-Guerrero, D.

- Iñiguez, A. Maiorano, F. Mantovani, E. Marinari, V. Martin-Mayor, J. Monforte-Garcia, A. Muñoz Sudupe, D. Navarro, G. Parisi, S. Perez-Gaviro, M. Pivanti, J. J. Ruiz-Lorenzo, S. F. Schifano, B. Seoane, A. Tarancon, F. Ricci-Tersenghi, R. Tripiccione, D. Yllanes, *Comp. Phys. Comm.* **185** (2014) 550, DOI information: 10.1016/j.cpc.2013.10.019 preprint [arXiv:1310.1032](https://arxiv.org/abs/1310.1032).
252. *Critical parameters of the three-dimensional Ising spin glass*, Janus Collaboration: M. Baity-Jesi, R. Alvarez Baños, A. Cruz, L. A. Fernandez, J. M. Gil-Narvion, A. Gordillo-Guerrero, D. Iñiguez, A. Maiorano, F. Mantovani, E. Marinari, V. Martin-Mayor, J. Monforte-Garcia, A. Muñoz Sudupe, D. Navarro, G. Parisi, S. Perez-Gaviro, M. Pivanti, F. Ricci-Tersenghi, J. J. Ruiz-Lorenzo, S. F. Schifano, B. Seoane, A. Tarancon, R. Tripiccione, D. Yllanes, *Phys. Rev. B* **88** (2013) 224416. preprint [arXiv:1310.2910](https://arxiv.org/abs/1310.2910).
253. *RNA-based regulation: dynamics and response to perturbations of competing RNAs*, Matteo Figliuzzi, Andrea De Martino and Enzo Marinari, *Biophys. J.* 107(4) pp. 10111022, 19 August 2014, DOI: <http://dx.doi.org/10.1016/j.bpj.2014.06.035>, preprint [arXiv:1312.5537](https://arxiv.org/abs/1312.5537), December 2013.
254. *The three dimensional Ising spin glass in an external magnetic field: the role of the silent majority*, M. Baity-Jesi, R. A. Banos, A. Cruz, L. A. Fernandez, J. M. Gil-Narvion, A. Gordillo-Guerrero, D. Iniguez, A. Maiorano, F. Mantovani, E. Marinari, V. Martin-Mayor, J. Monforte-Garcia, A. Munoz Sudupe, D. Navarro, G. Parisi, S. Perez-Gaviro, M. Pivanti, F. Ricci-Tersenghi, J.J. Ruiz-Lorenzo, S.F. Schifano, B. Seoane, A. Tarancon, R. Tripiccione and D. Yllanes, *J. Stat. Mech.* (2014) P05014, <http://www.iop.org/EJ/abstract/1742-5468/2014/05/P05014>, preprint [arXiv:1403.2622](https://arxiv.org/abs/1403.2622).
255. *Cumulative overlap distribution function in realistic spin glasses*. A. Billoire, A. Maiorano, E. Marinari, V. Martin-Mayor and D. Yllanes, *Phys. Rev. B* **90** (2014) 094201, preprint [arXiv:1406.1639](https://arxiv.org/abs/1406.1639).
256. *Cross correlations of the American baby names*, P. Barucca, J. Rocchi,

- E. Marinari, G. Parisi and Federico Ricci-Tersenghi, Proc. Natl. Acad. Sc. **112** (2015) 7943-7947, preprint [arXiv:1410.2771](https://arxiv.org/abs/1410.2771).
257. *Spontaneous energy-barrier formation in an entropy-driven glassy dynamics*, C. Cammarota and E. Marinari, Phys. Rev. E **92** (2015) 010301(R), preprint [arXiv:1410.2116](https://arxiv.org/abs/1410.2116).
258. F. Belletti, M. Cotallo, A. Cruz, L. A. Fernandez, A. Gordillo-Guerrero, M. Guidetti, A. Maiorano, F. Mantovani, E. Marinari, V. Martin-Mayor, A. Munoz Sudupe, D. Navarro, G. Parisi, S. Perez-Gaviro, M. Rossi, J. J. Ruiz-Lorenzo, J. F. Saenz-Lorenzo, S. F. Schifano, D. Sciretti, A. Tarancon, R. Tripiccione, J. L. Velasco, D. Yllanes and G. Zanier (2009), *Monte Carlo simulations for statistical physics: Janus*, Il Nuovo Cimento B (ISSN:2037-4895), 972- 974, 123;
259. F. Belletti, M. Cotallo, A.Cruz, L.A. Fernandez,A. Gordillo, A. Maiorano, F. Mantovani1, E. Marinari, V. Martin-Mayor, A. Munoz-Sudupe, D. Navarro, S. Perez-Gaviro, M. Rossi, J.J. Ruiz-Lorenzo, S.F. Schifano, D. Sciretti,A. Tarancon, R. Tripiccione, J.L. Velasco (2007) *JANUS: Scientific Computing on an FPGA-Based Architecture*, in *Parallel Computing: Architectures, Algorithms and Applications - Proceedings*, 553 560 15 9781586037963 4. - 7. September 2007 RWTH Aachen Univ, Aachen,
260. Belletti, F; Cruz, A; Fernandez, LA; Gordillo-Guerrero, A; Guidetti, M; Maiorano, A; Mantovani, F; Marinari, E; Martin-Mayor, V; Sudupe, AM; Navarro, D; Parisi, G; Perez-Gaviro, S; Ruiz-Lorenzo, JJ; Schifano, SF; Sciretti, D; Tarancon, A; Tripiccione, R; Yllanes, D, *Nonequilibrium spin glass dynamics with Janus*, in *MODELING AND SIMULATION OF NEW MATERIALS*, 1091: 228-230 2009, edited by Garrido, PL; Hurtado, PI; Marro, J, Book series title: AIP CONFERENCE PROCEEDINGS Conference Title: 10th Granada Seminar, Conference Date: SEP 15-19, 2008, Conference Location: Granada, SPAIN, Conference Host: Univ Granada, Fac Ciencias. ISSN: 0094-243X ISBN: 978-0-7354-0624-7
261. *Quantitative constraint-based computational model of tumor-to-stroma coupling via lactate shuttle*, Fabrizio Capuani, Daniele De Martino,

- Enzo Marinari and Andrea De Martino, *Sci. Rep.* **5** (2015) 11880, preprint [arXiv:1507.01962](https://arxiv.org/abs/1507.01962).
262. *Constrained Allocation Flux Balance Analysis*, Matteo Mori, Terry Hwa, Olivier Martin, Andrea De Martino and Enzo Marinari, *PLoS Comput Biol* **12**(6): e1004913, <http://journals.plos.org/ploscompbiol/article?id=10.1371/journal.pcbi.1004913> <http://dx.doi.org/10.1371/journal.pcbi.1004913> preprint [arXiv:1607.00128](https://arxiv.org/abs/1607.00128).
263. *Probing the Limits to MicroRNA-Mediated Control of Gene Expression*, Araks Martirosyan, Matteo Figliuzzi, Enzo Marinari and Andrea De Martino, *PLOS Comput. Biol.* **12** (2016) e1004715, DOI: 10.1371/journal.pcbi.1004715, preprint [arXiv:1601.07191](https://arxiv.org/abs/1601.07191).
264. *A numerical study of planar arrays of correlated spin islands*, I. Maccheri, A. Maiorano, E. Marinari and J. J. Ruiz-Lorenzo, *Eur. Phys. J. B* **38** (2016) 127, preprint [arXiv:1509.04593](https://arxiv.org/abs/1509.04593).
265. *Noise Processing by MicroRNA-Mediated Circuits: the Incoherent Feed-Forward Loop, Revisited*, S. Grigolon, F. Di Patti, A. De Martino and E. Marinari, *Heliyon* (2016) e00095, DOI: 10.1016/j.heliyon.2016.e00095 preprint [arXiv:1604.02919](https://arxiv.org/abs/1604.02919)
266. *Universal critical behavior of the 2d Ising spin glass*, L. A. Fernandez, E. Marinari, V. Martin-Mayor, G. Parisi, and J. J. Ruiz-Lorenzo, *Phys. Rev. B* **94** (2016) 024402, URL: <http://link.aps.org/doi/10.1103/PhysRevB.94.024402> DOI: 10.1103/PhysRevB.94.024402 preprint [arXiv 1604.04533](https://arxiv.org/abs/1604.04533) <http://arxiv.org/abs/1604.04533>
267. *Temperature chaos is a non-local effect* L. A. Fernandez, E. Marinari, V. Martin-Mayor, G. Parisi and D. Yllanes, *J. Stat. Mech.* (2016) 123301, <http://dx.doi.org/10.1088/1742-5468/2016/12/123301> preprint [arXiv 1605.03025](https://arxiv.org/abs/1605.03025) <http://arxiv.org/abs/1605.03025> .

268. *Sample-to-sample fluctuations of power spectrum of a random motion in a periodic Sinai model*, David S. Dean, Antonio Iorio, Enzo Marinari and Gleb Oshanin, Phys. Rev. E 94 (2016) 032131 DOI 10.1103/PhysRevE.94.032131, preprint arXiv 1607.00058,
269. *A statics-dynamics equivalence through the fluctuation-dissipation ratio provides a window into the spin-glass phase from nonequilibrium measurements*, Janus Collaboration: M. Baity-Jesi, E. Marinari et al., PNAS 114 (2017) 1838, preprint arXiv 1610.01418.
270. *Matching microscopic and macroscopic responses in glasses*, Janus Collaboration: M. Baity-Jesi, E. Marinari et al., Phys. Rev. Lett. 118 (2017) 157202, DOI 10.1103/PhysRevLett.118.157202 preprint arXiv:1704.07777
271. *ceRNA crosstalk stabilizes protein expression and affects the correlation pattern of interacting proteins*, A. Martirosyan, A. De Martino, A. Pagnani and E. Marinari, Scientific Reports, 7:43673, Mar 7, 2017 <http://rdcu.be/pRIw> DOI: 10.1038/srep43673, preprint arXiv 1703.02758.
272. *Dynamic Variational Study of Chaos: Spin Glasses in Three Dimensions*, A. Billoire, L. A. Fernandez, A. Maiorano, E. Marinari, V. Martin-Mayor, J. Moreno-Gordo, G. Parisi, F. Ricci-Tersenghi, and J. J. Ruiz-Lorenzo, submitted to JSTAT, preprint <http://arxiv.org/abs/1709.09829>
273. *A yield-cost tradeoff governs Escherichia coli's decision between fermentation and respiration in carbon-limited growth*, M. Mori, E. Marinari and A. De Martino, preprint arXiv 1703.00748 submitted.
274. *Numerical Construction of the Aizenman-Wehr Metastate*, A. Billoire, L. A. Fernandez, A. Maiorano, E. Marinari, V. Martin-Mayor, J. Moreno-Gordo, G. Parisi, F. Ricci-Tersenghi, and J. J. Ruiz-Lorenzo, Phys. Rev. Lett., preprint arXiv 1704.01390.
275. *Phase Transitions in Integer Linear Problems*, S. Colabrese, D. De Martino, L. Leuzzi and E. Marinari, J. Stat. Mech. (2017) 093404, DOI: <http://dx.doi.org/10.1088/1742-5468/aa85c3> preprint arXiv 1705.06303.
276. *Power Spectral Density of a Single Brownian Trajectory: What One Can and Cannot Learn from it*, D. Krapf, E. Marinari, R. Metzler,

G.Oshanin, A. Squarcini and Xinran Xu, submitted to New Journal of Physics.

277. *Numerical Evidences of Universal Trap-Like Aging Dynamics*, C. Cammarota and E. Marinari, submitted to JSTAT, preprint arXiv 1710.07936.

Last updated: October 25th, 2017