

Luca Peliti

Curriculum Vitæ

General information

- **Born:** Rome (Italy), 18 August 1948.
- **Nationality:** Italian.
- **Family status:** Married, two children.
- **Languages:** Italian, French, English, Spanish, German.
- **Professional address:**
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Via Luigia Sanfelice 22bis, I-80127 Napoli (Italie). Tel.: +39-081-5585323.
- **E-mail:** `peliti@na.infn.it`
- **Present position:**
Professor of Statistical Mechanics, Faculty of Sciences, University “Federico II”, Naples (Italy).

Studies

- Laurea in Fisica (24 February 1971). University de Rome. Note: 110/110 *cum laude*.
- Ph. D. (17 June 1974). Queen Mary College, University of London.

Positions

1. Scholarship, Ministry of Education (Italy), 1972-74.
2. Associate researcher, University of Rome, 1974-78.
3. Voluntary researcher, Gruppo Nazionale di Struttura della Materia, 1974-1994.
4. Temporary foreign collaborator, Service de Physique Théorique, Centre d'Études Nucléaires de Saclay (France) 1975-77.
5. Lecturer of Structure of Matter, Università della Calabria, Cosenza (Italy), 1977-78.
6. Lecturer in Physics (Pharmacy), University of Camerino (Italy), 1978-79.
7. Assistant of Structure of Matter, University "La Sapienza" (Rome), 1979-83.
8. Associate Professor of Experimental Physics, University de Rome "La Sapienza", 1983-87.
9. Associate Researcher, Istituto Nazionale di Fisica Nucleare, since 1985.
10. Professor of Quantum Mechanics, University "Federico II", Naples, 1987-88.
11. Researcher, Istituto Nazionale di Fisica della Materia, from 1994 to 2005.
12. Researcher, Consorzio Nazionale Interuniversitario di Struttura della Materia, since 2005.

Other activities

Editor of the following journals:

- European Physical Journal E
- Physics of Life Reviews
- Journal of Statistical Mechanics: Theory and Experiment

Moderator of the electronic archive [arXiv:q-bio](https://arxiv.org/archive/bio) (Quantitative Biology), sector: Populations and Evolution.

Publications in scientific journals

The type of publication is determined by the following code: (A): article; (R): review; (L): letter; (C): comment; (E): erratum.

1. **Ginestra Bianconi, Davide Fichera, Silvio Franz and Luca Peliti:** Modeling microevolution in a changing environment: The evolving quasispecies and the Diluted Champion Process, *JSTAT: Journal of Statistical Mechanics: Theory and Experiment*, P08022 (2011)(A).
2. **Anne-Florence Bitbol, Luca Peliti and Jean-Baptiste Fournier:** Membrane stress tensor in the presence of lipid density and composition inhomogeneities, *Eur. Phys. J. E* **34** 53 (2011)(A).
3. **A. Imparato and L. Peliti:** Work distribution in manipulated single biomolecules, *Phys. Biol.* **6** 025011 (2009)(A).
4. **Luca Peliti:** Comment on "Failure of the work-Hamiltonian connection for free energy calculations", *Phys. Rev. Lett.* **101** 098903 (2008)(C).
5. **L. Peliti:** On the work-Hamiltonian connection in manipulated systems, *JSTAT: Journal of Statistical Mechanics: Theory and Experiment*, P05002 (2008)(A).
6. **A. Imparato, L. Peliti, G. Pesce, G. Rusciano, A. Sasso:** Work and heat probability distribution for an optically driven Brownian particle: Theory and experiments, *Phys. Rev. E* **76**, 050101(R) (2007)(A).
7. **Sumedha, Olivier C. Martin, Luca Peliti:** Selection and population size effects in evolutionary dynamics, *JSTAT: Journal of Statistical Mechanics: Theory and Experiment*, P05011 (2007)(A).
8. **Alberto Imparato and Luca Peliti:** The distribution function of entropy flow in stochastic systems, *JSTAT: Journal of Statistical Mechanics: Theory and Experiment*, L02001 (2007)(L).
9. **Luca Peliti:** On the equipartition of energy in an ideal gas mixture, *European Journal of Physics* **28**, 249–254 (2007)(A).
10. **A. Imparato and L. Peliti:** Fluctuation relations for a driven Brownian particle, *Phys. Rev. E* **74**, 026106 (2006)(A).

11. **Cristian Giardinà, Jorge Kurchan, Luca Peliti:** Direct evaluation of large-deviation functions, *Phys. Rev. Lett.* **96**, 120603 (2006)(L).
12. **Alberto Imparato, Luca Peliti:** Evaluation of free energy landscapes from manipulation experiments, *JSTAT: Journal of Statistical Mechanics: Theory and Experiment*, P03005 (2006)(A).
13. **A. Imparato, L. Peliti:** Work probability distribution in single-particle experiments, *Europhys. Lett.*, **69**, 643–650 (2005)(L).
14. **Francesca Tria, Michael Lässig, Luca Peliti, Silvio Franz:** A minimal stochastic model for influenza evolution, *JSTAT: Journal of Statistical Mechanics: Theory and Experiment*, P07008 (2005)(A).
15. **A. Imparato, L. Peliti:** Work probability distribution in systems driven out of equilibrium, *Phys. Rev. E* **72**, 046114 (2005)(A).
16. **S. Gekle, L. Peliti, S. Galam:** Opinion dynamics in a three-choice system, *Eur. Phys. J. B* **45**, 569–575 (2005)(A).
17. **A. Imparato, L. Peliti:** Work distribution and path integrals in general mean-field systems, *Europhysics Letters* **70**, 740–746 (2005)(L).
18. **A. Imparato, L. Peliti:** Kinetic barriers in RNA unzipping, *Eur. Phys. J. B.*, **39**, 357–363 (2004)(L).
19. **Y. Kafri, D. Mukamel, L. Peliti:** Kafri, Mukamel and Peliti Reply, *Phys. Rev. Lett.* **90**, 159802-1 (2003)(C).
20. **M. Lässig, L. Peliti, F. Tria:** Evolutionary games and quasispecies, *Europhys. Lett.* **62**, 446–451 (2003)(L).
21. **Y. Kafri, D. Mukamel, L. Peliti:** Melting and unzipping of DNA, *Eur. Phys. J. B* **27**, 135-146 (2002)(A).
22. **L. Peliti:** Quasispecies evolution in general mean-field landscapes, *Europhysics Lett.* **57**, 745–751 (2002)(L).
23. **A. Parmeggiani, F. Jülicher, L. Peliti, J. Prost:** Detachment of molecular motors under tangential loading, *Europhys. Lett.* **56**, 603–609 (2001)(L).
24. **J.-B. Fournier, A. Ajdari, L. Peliti:** Effective-Area Elasticity and Tension of Micromanipulated Membranes, *Phys. Rev. Lett.* **86**, 4970–4973 (2001)(L).

25. **J.-B. Fournier, L. Peliti:** Comment on "Theory for the bending anisotropy of lipid membranes and tubule formation", *Phys. Rev. E* **63**, 13901-13092 (2001)(L).
26. **Y. Kafri, D. Mukamel, L. Peliti:** Why is the DNA denaturation transition first order? *Phys. Rev. Lett.* **85**, 4988-4991 (2000)(L).
27. **Raphaël Exartier, Luca Peliti:** Measuring effective temperatures in out-of-equilibrium driven systems, *Eur. Phys. J. B* **16** 119–126 (2000)(A).
28. **Silvio Franz, Marc Mézard, Giorgio Parisi, Luca Peliti:** The response of a glassy system to random perturbations: A bridge between equilibrium and off-equilibrium, *J. Stat. Phys.* **97**, 459–488 (1999)(A).
29. **R. Exartier, L. Peliti:** A simple system with two temperatures, *Physics Letters A* **261** 94–97 (1999)(L).
30. **M. Bengrine, A. Benyoussef, A. El Kenz, F. Mhirech, L. Peliti:** Amorphization and anisotropy effects on a ferromagnetic bilayer system, *Physica B: Condensed Matter* **269** 34–42 (1999)(A).
31. **L. Peliti, M. Saber:** Effective Field Approach to the Ising Film in a Transverse Field, *Physica A*, **262** 505–517 (1999)(A).
32. **A. Benyoussef, D. Dohmi, A. El Kenz, L. Peliti:** Phase Diagram of Randomly Polymerized Membrane, *Eur. Phys. J. B* **6** 503–510 (1998)(A).
33. **L. Peliti:** A Solvable Model of the Evolutionary Loop, *Europhys. Lett.* **44** 546–551 (1998)(L).
34. **J.-B. Fournier, L. Peliti:** Paired Defects of Nematic Surfactant Bilayers, *Phys. Rev.* **E58** R6919–R6922 (1998)(L).
35. **S. Franz, M. Mézard, G. Parisi, L. Peliti:** Measuring Equilibrium Properties in Aging Systems, *Phys. Rev. Lett.* **81** 1758–1761 (1998)(L).
36. **R. Donato, L. Peliti, M. Serva:** The Selection of Altruistic Behavior, *Theory Bioscienc.* **116** 309–320 (1997)(A).
37. **J. Kurchan, L. Peliti, M. Sellitto:** Aging in Lattice-Gas Models with Constrained Dynamics, *Europhys. Lett.* **39** 365–370 (1997)(L).

38. **P. Le Doussal, L. F. Cugliandolo, L. Peliti:** Dynamics of Particles and Manifolds in Random Force Fields, *Europhys. Lett.* **39** 111–116 (1997)(L).
39. **S. Franz, L. Peliti:** Error Threshold in Simple Landscapes, *J. Phys. A: Math. Gen.* **30** 4481–4487 (1997)(L).
40. **L. F. Cugliandolo, J. Kurchan, L. Peliti:** Energy Flow, Partial Equilibration, and Effective Temperatures in Systems with Slow Dynamics, *Phys. Rev.* **E55** 3898–3914 (1997)(A).
41. **L. F. Cugliandolo, J. Kurchan, P. Le Doussal, L. Peliti:** Glassy Behavior in Disordered Systems with Non-Relaxational Dynamics, *Phys. Rev. Lett.* **78** 350–354 (1997)(L).
42. **L. Peliti, M. Saber:** The Spin-3/2 Blume-Capel Model on a Honeycomb Lattice, *Phys. Stat. Sol. (b)* **195** 537–548 (1996) (A).
43. **G. Duchateau-Nguyen, G. Weisbuch, L. Peliti:** A Compartmental Model of Endosymbiosis, *Journal of Biological Systems* **3** 867–888 (1995)(A).
44. **F. Manzo, L. Peliti:** Geographic Speciation in the Derrida-Higgs Model of Species Formation, *J. Phys. A: Math. Gen.* **27** 7079–7086 (1994) (A).
45. **J. Kurchan, L. Peliti, M. Saber:** A Statistical Investigation of Bidirectional Associative Memories (BAM), *J. Phys. I France* **4** 1627–1639 (1994) (A).
46. **A. Ajdari, D. Mukamel, L. Peliti, J. Prost:** Rectified Motion Induced by ac Forces in Periodic Structures, *J. Phys. I France* **4** 1551–1561 (1994) (A).
47. **J. W. Tucker, M. Saber, L. Peliti:** A New Technique in the Effective Field Theory of General Spin S Dilute Ising Models, *Physica A* **206** 497–507 (1994) (A).
48. **L. Peliti, U. Bastolla:** Collective Adaptation in a Statistical Model of an Evolving Population, *C. R. Acad. Sci. Paris, Sciences de la Vie* **317** 371–374 (1994) (L).
49. **J. Prost, J.-F. Chauwin, L. Peliti, A. Ajdari:** Asymmetric Pumping of Particles, *Phys. Rev. Lett.* **72** 2652–2655 (1994)(L).

50. **S. Franz, L. Peliti, M. Sellitto:** An Evolutionary Version of the Random Energy Model, *J. Phys. A: Math. Gen.* **26** L1195–L1199 (1993) (L).
51. **J. Piasecki, L. Peliti:** Harmonic Properties of Hard-Sphere Crystals: A One-Dimensional Study, *J. Phys. A: Math. Gen.* **26** 4819–4825 (1993) (A).
52. **D. Bensimon, D. Mukamel, L. Peliti:** Quenched Curvature Disorder in Polymerized Membranes, *Europhys. Lett.* **18** 269–274 (1992) (L).
53. **A. Ajdari, B. Duplantier, D. Hone, L. Peliti, J. Prost:** “Pseudo-Casimir” Effect in Liquid Crystals, *J. Phys. II France* **2** 487–501 (1992) (A).
54. **U. Bastolla, L. Peliti:** Un modèle statistique d’évolution avec sélection stabilisante, *C. R. Acad. Sci. Paris, Série III* **313** 101–105 (1991)(L).
55. **M. Serva, L. Peliti:** A Statistical Model of an Evolving Population with Sexual Reproduction, *J. Phys. A: Math. Gen.* **24** L705–L709 (1991)(L).
56. **B. Derrida, L. Peliti:** Evolution in a Flat Fitness Landscape, *Bull. Math. Biol.* **53** 355–382 (1991)(A).
57. **A. Ajdari, L. Peliti, J. Prost:** Fluctuation-Induced Long-Range Forces in Liquid Crystals, *Phys. Rev. Lett.* **66** 1481–1484 (1991)(L).
58. **C. Amitrano, L. Peliti, M. Saber:** Population Dynamics in a Spin-Glass Model of Chemical Evolution, *J. Mol. Evol.* **29** 513–525 (1989)(A).
59. **E. Guitter, F. David, S. Leibler, L. Peliti:** Thermodynamical Behavior of Polymerized Membranes, *J. Phys. France* **50** 1787–1819 (1989)(A).
60. **L. Peliti, J. Prost:** Fluctuations in Membranes with Reduced Symmetry, *J. Phys. France* **50** 1557–1571 (1989)(A).
61. **E. Guitter, F. David, S. Leibler, L. Peliti:** Crumpling and Buckling Transitions in Polymerized Membranes, *Phys. Rev. Lett.* **61** 2949–2952 (1988)(L).

62. **C. Amitrano, L. Peliti, M. Saber:** Neutralisme et adaptation dans un modèle simple d'évolution moléculaire, *C. R. Acad. Sci. Paris, Série III*, **307** 803–806 (1988)(L).
63. **A. Mecozzi, F. De Pasquale, L. Peliti:** Unified Approach to Stochastic Representations in Reaction Kinetics, *N. Cim.* **100B** 733–743 (1987)(A).
64. **F. David, E. Gutter, L. Peliti:** Critical Properties of Fluid Membranes with Hexatic Order, *J. Phys. France* **48** 2059–2066 (1987)(A).
65. **A. Crisanti, L. Peliti:** On the Possible Non-Universality of Critical Behavior in Micellar Solutions, *J. Phys. A: Math. Gen.* **20** 1289–1292 (1987)(L).
66. **L. Peliti, L. Pietronero:** Random Walks with Memory, *Riv. N. Cim.* **10** (6) 1–33 (1987)(R).
67. **D.R. Nelson, L. Peliti:** Fluctuations in Membranes with Crystalline and Hexatic Order, *J. Phys. France* **48** 1085–1091 (1987)(A); **49** 139 (1988)(E).
68. **C. Castellani, C. Di Castro, L. Peliti:** On the Upper Critical Dimension in Anderson Localisation, *J. Phys. A: Math. Gen.* **19** L1099–L1103 (1986)(L).
69. **G. Paladin, L. Peliti, A. Vulpiani:** Intermittency as Multifractality in History Space, *J. Phys. A: Math. Gen.* **19** L991–L996 (1986)(L).
70. **C. Castellani, L. Peliti:** Multifractal Wavefunction at the Localisation Threshold, *J. Phys. A: Math. Gen.* **19** L429–L432 (1986)(L).
71. **L. Peliti:** Renormalisation of Fluctuation Effects in the $A + A \rightarrow A$ Reaction, *J. Phys. A: Math. Gen.* **19** L365–L367 (1986)(L).
72. **G. Paladin, L. Peliti, A. Vulpiani:** Feasibility of Model Ecosystems, *N. Cim.* **7D** 98–104 (1986)(A).
73. **L. Peliti, Zhang Y.-C.:** Field Theory Approach to the Eden Model and Diffusion-Limited Aggregation, *J. Physique Lett.* **46** L1151–L1157 (1985)(L).
74. **L. Peliti:** Path Integral Approach to Birth-Death Processes on a Lattice, *J. Phys. France* **46** 1469–1483 (1985)(A).

75. **L. Pietronero, L. Peliti:** Flory Approach to the Enhancement Factor in Polymer Statistics, *Phys. Rev. Lett.* **55** 1479–1481 (1985)(L).
76. **Zhang Y.-C., L. Peliti:** “True” Self-Avoiding Lévy Flights, *J. Phys. A: Math. Gen.* **18** L755–L756 (1985)(L).
77. **L. Peliti, Zhang Y.-C.:** Renormalisation of the Long-Range “True” Self-Avoiding Walk, *J. Phys. A: Math. Gen.* **18** L709–L712 (1985)(L).
78. **A. Crisanti, L. Peliti:** Migdal-Kadanoff Approach to Superfluid Film Formation in ^3He - ^4He Mixtures, *J. Phys. A: Math. Gen.* **18** L543–L547 (1985)(L).
79. **L. Peliti, S. Leibler:** Effects of Thermal Fluctuations on Systems with Small Surface Tension, *Phys. Rev. Lett.* **54** 1690–1693 (1985)(L).
80. **L. Peliti:** Some Observations on Kinetic Walk Models, *J. Physique Lett.* **45** L925–L928 (1984)(L).
81. **L. Peliti, S. Leibler:** A Simple Model describing ^3He - ^4He Mixtures near a Wall, *J. Physique Lett.* **45** L591–L596 (1984)(L).
82. **S. Leibler, L. Peliti:** Possible Observation of Surface and Special Transitions in Mixtures, *Phys. Rev.* **B29** 1253–1257 (1984)(A).
83. **L. Peliti, S. Leibler:** Strong Adsorption in Critical Binary Mixtures, *J. Phys. C: Solid State* **16** 2635–2640 (1983)(A).
84. **R. Benzi, L. Peliti, A. Vulpiani:** Fractal Dimensions and $1/f$ Noise, *Lett. N. Cim.* **36** 471–474 (1983)(L).
85. **S.P. Obukhov, L. Peliti:** Renormalisation of the “True” Self-Avoiding Walk, *J. Phys. A: Math. Gen.* **16** L147–L152 (1983)(L).
86. **D.J. Amit, G. Parisi, L. Peliti:** Asymptotic Behavior of the “True” Self-Avoiding Walk, *Phys. Rev.* **B27** 1635–1645 (1983)(A).
87. **S. Leibler, L. Peliti:** Magnetisation Profile in Presence of a Surface Magnetic Field, *J. Phys. C: Solid State* **30** L403–L407 (1982)(L).
88. **F. Fucito, F. Marchesoni, E. Marinari, G. Parisi, L. Peliti, S. Ruffo, A. Vulpiani:** Approach to Equilibrium in a Chain of Nonlinear Oscillators, *J. Phys. France* **43** 707–713 (1982)(A).

89. **D.J. Amit, L. Peliti:** On Dangerous Irrelevant Operators, *Ann. Phys. (N.Y.)* **140** 207–231 (1982)(A).
90. **G. Paladin, L. Peliti:** Fixed Dimensional Computation of Critical Transport Properties of Fluids, *J. Physique Lett.* **43** L15–L20 (1982)(L); **45** L268 (1984)(E).
91. **D.J. Amit, Y.Y. Goldschmidt, L. Peliti:** Cross-Over Behavior of the Nonlinear σ -Model with Quadratically Broken Symmetry, *Ann. Phys. (N.Y.)* **116** 1–34 (1978)(A).
92. **C. De Dominicis, L. Peliti:** Field Theory Renormalization and Critical Dynamics above T_c : Helium, Antiferromagnets and Liquid-Gas Systems, *Phys. Rev.* **B18** 353–376 (1978)(A).
93. **C. De Dominicis, S.-K. Ma, L. Peliti:** Critical Dynamics near Dimension Two for Time-Dependent Ginzburg-Landau Models, *Phys. Rev.* **B15** 4313–4317 (1977)(A).
94. **C. De Dominicis, L. Peliti:** Deviations from Dynamic Scaling in Helium and Antiferromagnets, *Phys. Rev. Lett.* **38** 505–508 (1977)(L).
95. **C. Di Castro, G. Jona-Lasinio, L. Peliti:** Variational Principles, Renormalization Group and Kadanoff’s Universality, *Ann. Phys. (N.Y.)* **87** 327–353 (1974)(A).
96. **G. Parisi, L. Peliti:** Critical Indices for the Spherical Model from Conformal Covariant Self-Consistency Conditions, *Phys. Lett.* **41A** 331–332 (1972)(L).
97. **M. D’Eramo, G. Parisi, L. Peliti:** Theoretical Predictions for Critical Exponents at the λ -Point of Bose Liquids, *Lett. N. Cim.* **2** 878–880 (1971)(L).
98. **G. Parisi, L. Peliti:** Calculation of Critical Indices, *Lett. N. Cim.* **2** 627–629 (1971)(L).

Conference proceedings and contributions to collective works

The type of publication is determined by the following code: (I): invited contribution; (C): contribution; (E): erratum.

1. **Alberto Imparato and Luca Peliti:** Work and heat probability distributions in out-of-equilibrium systems, **C. R. Physique** **8**, 556–566 (2007)(I).
2. **Y. Kafri, D. Mukamel, L. Peliti:** Denaturation and unzipping of DNA: Statistical mechanics of interacting loops, *Physica A* **306**, 39-50 (2002)(I).
3. **J.-B. Fournier, P. Galatola and L. Peliti:** On the effects of a nematic phase confined to a membrane, *Mol. Cryst. Liq. Cryst.* **332** 3049–3056 (1999)(I).
4. **L. Peliti:** Transitions in Evolutionary Dynamics, *Rivista di Biologia/Biology Forum*, **91** 312–314 (1998) (Proceedings of a Meeting on Theoretical Biophysics, Genova, January 23, 1998)(I).
5. **L. Peliti, M. Sellitto:** Aging in a Simple Model of a Structural Glass, in: **A. Vulpiani, M. Serva, G. Parisi, L. Peliti, L. Pietronero** (eds.): *International Conference on Disorder and Chaos in Honour of Giovanni Paladin*, Rome 1997, *J. Phys. France IV* **8** Pr6 49–56 (1998)(I).
6. **L. Peliti:** Shapes and Fluctuation in Membranes, in: **H. Flyvbjerg, J. Hertz, M. H. Jensen, O. G. Mouritsen, K. Sneppen:** *Physics of Biological Systems, From Molecules to Species* (Berlin: Springer Verlag, 1997) 171–188 (I).
7. **L. Peliti:** Fitness Landscapes and Evolution, in: **T. Riste, D. Sherrington** (Eds.): *Physics of Biomaterials: Fluctuations, Self-Assembly and Evolution* (Dordrecht: Kluwer, 1996) 287–308 (I).
8. **L. Peliti:** Amphiphilic Membranes, in F. David, P. Ginsparg, J. Zinn-Justin (Eds.): *Fluctuating Geometries in Statistical Mechanics and Field Theory*, Les Houches, Session LXII, 1994 (Amsterdam: Elsevier, 1996) 195–285 (R).

9. **G. Duchateau, G. Weisbuch, L. Peliti:** Emergence of Mutualism, in: **W. Banzhaf, F. Eeckman** (eds.): *Evolution as a Computational Process* (Berlin: Springer, 1995) 18–26 (C).
10. **L. Peliti:** Polymers in a Random Environment and Molecular Quasi-Species, in: **Y. Rabin, R. Bruinsma** (eds.): *Soft Order in Physical Systems* (New York: Plenum, 1994) 129–132 (C).
11. **S. Franz, M. Sellitto, L. Peliti:** Molecular Quasispecies and Spin Glasses, in: **A. Erzan, Ö. Pekcan** (eds.): *Recent Advances in Statistical Physics*, Proceedings of the Istanbul Summer School, *Tr. J. of Physics* **18** 384–388 (1994) (I).
12. **A. Ajdari, J. Prost, L. Peliti:** “Pseudo-Casimir” Effect in Liquid Crystals, in: **D. Beysens, N. Boccara, G. Forgács** (eds.): *Dynamical Phenomena at Interfaces, Surfaces and Membranes*, Les Houches Series (Commack, N. Y.: Nova Science Publishers, 1993) 449–456 (C).
13. **B. Derrida, L. Peliti:** Evolution in a Flat Fitness Landscape, in: **R. Livi, J.-P. Nadal, N. Packard** (eds.): *Complex Dynamics*, Les Houches Series (Commack, N. Y.: Nova Science Publishers, 1992) 201–206 (C).
14. **L. Peliti:** Disordered Systems and Evolutionary Models, in: **L. Peliti** (ed.): *Biologically Inspired Physics*, NATO ASI Series in Physics, Vol. 263 (New York: Plenum, 1991) 339–345 (I).
15. **C. Amitrano, L. Peliti, M. Saber:** A Spin-Glass Model of Evolution, in: **A. Perelson, S. A. Kauffman** (eds.): *Molecular Evolution on Rugged Landscapes*, SFI Studies in the Sciences of Complexity, Vol. IX, (Reading, Mass.: Addison-Wesley) 27–38 (1991)(I).
16. **L. Peliti:** Fluctuations in Hexatic Membranes, in: **E. Dubois-Violette, B. Pansu** (eds.): *International Workshop on Geometry and Interfaces, Colloque de Physique, supplément au Journal de Physique, Fasc. 23, C7-1990* 297-307 (1990)(I).
17. **L. Peliti:** A Spin-Glass Model of Chemical Evolution, in: **M. Deutsch, S. Havlin, M. Kaveh, Y. Yeshurun** (eds.): *Frontiers in Condensed Matter Physics, Physica A***168** 619–625 (1990)(I).
18. **L. Peliti:** Fluctuations in Solid and Hexatic Membranes, in : **C. Itzykson, S. Kirkpatrick, G. Parisi, N. Surlas, M.A. Virasoro**

- (eds.): *Common Trends in Statistical Physics and Field Theory*, *Physics Reports* **184** 271–272 (1989)(I).
19. **L. Peliti**: Biogenesis: Complexity and Disorder, in: **L. Peliti** (ed.): *Disordered Systems and Biological Models*, CIF Series, Vol. 14 (Singapore: World Scientific, 1989) 163–176 (I).
 20. **L. Peliti**: Universality Classes of Fluctuating Membranes, in: **R. Julien, L. Peliti, R. Rammal, N. Boccara** (eds.): *Universalities in Condensed Matter*, Springer Proceedings in Physics 32 (Berlin, Heidelberg: Springer, 1988) 100–105 (I).
 21. **L. Peliti**: A Simple Model of Molecular Evolution, in: **H.E. Stanley, N. Ostrowsky** (eds.): *Random Fluctuations and Pattern Growth: Experiments and Models* (Dordrecht: Kluwer, 1988) 325–328 (I).
 22. **L. Peliti**: Fluctuations in Fluid and Hexatic Membranes, in: **H.E. Stanley, N. Ostrowsky** (eds.): *Random Fluctuations and Pattern Growth: Experiments and Models* (Dordrecht: Kluwer, 1988) 218–221 (I).
 23. **L. Peliti**: Statistical Mechanical Models of the Emergence of Biological Order, in: **R. Livi, S. Ruffo, S. Ciliberto, M. Buiatti** (eds.): *Chaos and Complexity* (Singapore: World Scientific, 1988) 388–393 (I).
 24. **L. Peliti, D.R. Nelson**: Elasticity of Crystalline and Hexatic Membranes, in: **J. Meunier, D. Langevin, N. Boccara** (eds.): *Physics of Amphiphilic Layers*, Springer Proceedings in Physics 21 (Berlin, Heidelberg: Springer, 1987) 106–112 (I).
 25. **S. Leibler, R. Lipowsky, L. Peliti**: Curvature and Fluctuations of Amphiphilic Membranes in: **J. Meunier, D. Langevin, N. Boccara** (eds.): *Physics of Amphiphilic Layers*, Springer Proceedings in Physics 21 (Berlin, Heidelberg: Springer, 1987) 74–79 (I).
 26. **L. Peliti**: Effective Rigidity of Membranes, in: **H.E. Stanley** (ed.): *Statistical Physics*, Proceedings of the International IUPAP Conference on Statistical and Thermal Physics, STATPHYS 16, *Physica* **140A** 269–277 (1986)(I).
 27. **L. Peliti, Zhang Y.-C.**: Field Theory Approach to the Eden Model and Diffusion-Limited Aggregation, in: **L. Pietronero, E. Tosatti** (eds.) *Fractals in Physics* (Amsterdam: Elsevier, 1986) 269–272 (C).

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