CURRICULUM VITÆ

André LeClair

Address	Newman Laboratory Cornell University Ithaca, NY 14853.	
	Phone:	(607)-255-5169 (office)
	Internet:	andre.leclair@gmail.com

Citizenship	U.S., Canada	
Birthplace	Madawaska, Maine	
Languages	English, Spanish, French, Portuguese	
Education	1978-1982	B.S., Physics, M.I.T.
	1983-1987	Ph.D., Physics, HARVARD UNIVERSITY
Positions held	1987-1989	Research Associate, PRINCETON UNIVERSITY
	1989-1995	Assistant Professor, CORNELL UNIVERSITY
	1995-2001	Associate Professor, CORNELL UNIVERSITY
	2001-	Full Professor, CORNELL UNIVERSITY
Awards and Honors	1982	Phi Beta Kappa
	1992	Alfred P. Sloan Foundation Fellowship
	1993	National Young Investigator Award, from NSF

Research Interests: Mathematical physics, integrable systems, finite temperature field theory, cold atoms, topological insulators, cosmological constant.

Languages spoken: English, Spanish, Portuguese, French

Professional Activities

1. Organizer of Workshop on Integrability, Aspen Center for Physics, Aspen, Colorado, 1995.
2. Organizer of Workshop 'Statistical Field Theory', International Center for Theoretical Physics, Trieste, Italy, July 1998.
3. Head organizer of the long-term workshop, 'Quantum Integrability 2000', Centre de Recherche Mathematiques, Montreal, Canada, March-June 2000.
4. Organizer of workshop on applications of low dimensional quantum field theory to problems in solid state physics, Como, Italy, June 2000.
5. US principal investigator on a CRDF grant for the support of collaboration between US and Russian scientists.
6. Physics Editor for the ENCARTA WORLD ENGLISH DICTIONARY.
7. Editor of the journal 'Advances in Theoretical and Mathematical Physics'.
8. Editor of the international journal JSTAT, 'Journal of Statistical Mechanics: Theory and Experiment'.
9. Physics Course Director, CWMC Qatar.

Visiting Positions Held

1. Institute for Theoretical Physics, University of California, Santa Barbara, February - July 1996.
2. Centre d'Energie Atomique, Paris, France. January -March 2000.
3. University of Montreal, March - June 2000.
4. University of Paris at Jussieu, July 2000, May/June 2001.
5. Universidad Autónoma de Madrid, Sept-December 2002.
6. Universidad Autónoma de Madrid, June-July 2003
7. Universidad Autónoma de Madrid, June 2004
8. KITP, Santa Barbara, California, November/December 2006.
9. Newton Institute, Cambridge U.K. August-December 2007.
10. Galileo Institute, Florence, Italy, Sept-Nov. 2008.
11. Ecole Normale Superieur, Paris, France, November 2008.
12. Centro Brasiliero de Pesquisas Fisicas, Rio de Janeiro, Sept-Oct 2010.
13. Perimeter Institute, Waterloo, Canada. August 2011.
14. Ecole Normale Superieur, Paris, France, October 2011.
15. Centro Brasiliero de Pesquisas Fisicas, Rio de Janeiro, November/December 2011.
16. International Institute of Physics, Natal, Brazil, July 2012.
17. Centro Brasiliero de Pesquisas Fisicas, Rio de Janeiro, July 2012.
18. Ecole Normale Superieur, Paris, France, October 2012.
19. SISSA, Trieste, Italy, June 2013,

20. Centro Brasiliero de Pesquisas Fisicas, Rio de Janeiro, July 2013.
21. Centro Brasiliero de Pesquisas Fisicas, Rio de Janeiro, July 2014.
22. Centro Brasiliero de Pesquisas Fisicas, Rio de Janeiro, Feb. 2015.
23. Ecole Normale Superieur, Paris, France, May 2015.
24. Isaac Newton Institute for Mathematical Sciences, January 2016.

Invited Talks (and Seminars after 2007)

1. XVII'th International Colloquium on Group Theoretical Methods in Physics, Montreal, June 1988.

2. XVIII'th International Conference on Differential Geometric Methods in Theoretical Physics, July 1989,Lake Tahoe, CA.

3. Banff Summer School on Theoretical Physics, August 1989.

4. Argonne Workshop on Quantum Groups, 1991.

5. 25th International Conference on High Energy Physics, July 1990, Singapore.

6. XXth International Conference on Differential Geometric Methods in Theoretical Physics, June 1991, New York.

7. Alushta Conference, Crimea, Russia, 1993.

8. Quantum Groups, Integrable Models and Statistical Systems, NSERC conference, Kingston, Ontario, 1994.

9. Recent Progress in Statistical Mechanics and Quantum Field Theory, Los Angeles, 1995.

10. XIth International Congress of Mathematical Physics, Paris, July 1994.

11. Unified Symmetry: In the Small and in the Large II, Coral Gables 1995.

12. Low Dimensional Quantum Field Theory, ITP, Santa Barbara 1996.

13. Quantum Field Theory in Solid State Physics, Amsterdam 1999.

14. Workshop on Integrable Models, Bologna, Italy, 1999.

15. Quantum Integrability 2000, Montreal 2000.

16. Quantum Field Theory and Solid State Physics, Amsterdam 2001.

17. Applications of Conformal Field Theory, Institute for Pure and Applied Mathematics, Los Angeles, October 2001.

18. Workshop on Integrable Field Theories, Solitons and Duality, Sao Paulo, Brazil, July 2002.

19. Quantum Field Theory and Solid State Physics, Amsterdam 2003.

20. Miami 2004, December 2004.

21. Amsterdam, Quantum Field Theory and Solid State Physics, July 2005

22. Santiago de Compostela, Spain, Quantum Integrability with applications to solid state and string theory, Sept. 2005

23. Helsinki, Finland, Renormalization Group 2005, Aug. 2005.

24. KITP, Santa Barbara, Workshop on SLE and stochastic geometry, December 2006.

25. Colloquium at University of Central Florida, Orlando, FL, March 2007.

26. Isaac Newton Institute for Mathematical Sciences, Cambridge UK, August, December 2007.

27. Rutgers University, Seminar, Spring 2009.

27. Galileo Institute, Florence, Italy, October 2009.

28. Ecole Normal Superieur, Paris, November 2008.

29. Mainz, Germany, November 2008.

30. Coral Gables Conference, Miami 2009, Fort Lauderdale, FL, December 2009

31. Conference on low-dimensional systems, Benasque, Spain, July 2010

32. Brazilian Center for Physics Research, Rio de Janeiro, 2 seminars, September 2010.

33. UFF University, Rio de Janeiro, 2010

34. Physics Congress in the Dominican Republic, June 2011

35. Perimeter Institute, program on Integrability in Gauge and String Theory, August 2011.

36. Ecole Normale Supérieur, Paris. October 2011.

37. Universidad Autonoma de Santo Domingo, June 2012.

38. International Institute of Physics, Natal, Brazil, July 2012.

39. Washington University St. Louis, November 2012.

40. LEPP Journal Club, Cornell, March 2013

41. SISSA seminar, Trieste, Italy, June 2013.

42. Colloquium, University North Carolina, April 2014

43. Lecture series on the Riemann zeta function, Leibniz University, Hannover, Germany, June 2014.

44. Ecole Normal Superieur, Paris, May 2015.

45. Isaac Newton Institute for Mathematical Sciences, January 2016.

46. Physics Department Colloquium, February 2016.

PUBLICATIONS

1. *Compton Scattering off Quarks*, M.I.T undergraduate thesis.
2. *Fermionic String Field Theory*, Phys. Lett. 168B: 53, 1986.
3. *Gauge Invariant Superstring Field Theory*, Nucl. Phys. B273: 552, 1986, (with Jacques Distler).
4. *String Field Theory on the Conformal Plane I*, Nucl. Phys. B317 (1989) 411, (with M. Peskin and C. Preitschopf).
5. *String Field Theory on the Conformal Plane II*, Nucl. Phys. B317 (1989) 464, (with M. Peskin and C. Preitschopf).
6. *A Diagrammatic Operator Formulation of the Multiloop String S-matrix,* Nucl. Phys. B297 (1988), 603.
7. *String Field Theory and the Multiloop String S-Matrix* Harvard PhD. Thesis, 1987.
8. *An Operator Formulation of the Superstring*, Nucl. Phys. B303 (1988) 189.
9. *An Operator Formulation of the Superstring*, Princeton Preprint PUPT-1106 (1988) , Talk presented at XVII'th International Colloquium on Group Theoretical Methods in Physics, Montreal, June 1988.
10. *Supersymmetric KP Hierarchy: Free Field Construction*, Nucl. Phys. B314 (1989) 425.
11. *q-Deformation of SU(1,1) Con- formal Ward Identities and q-Strings*, (with Denis Bernard), Phys. Lett. 227B (1989) 417.
12. *Restricted Sine-Gordon Theory and the Minimal Conformal Series*, Phys. Lett. 230B (1989) 103.
13. *q-Deformation of SU(1,1) Conformal Ward Identities and q-Strings*, Cornell Preprint CLNS 89/933, Published in the proceedings of the XVIII'th International Conference on Differential Geometric Methods in Theoretical Physics, July 1989,Lake Tahoe, CA.
14. *Integrable Restrictions of Quantum Soliton Theory and Minimal Conformal Series*, Cornell Preprint, Published in 'Physics, Geometry, and Topology', Plenum Press, c1991, H. C. Lee, ed. , proceedings of Banff Summer School on Theoretical Physics, August 1989, p. 605.
15. *Residual Quantum Symmetries of the Restricted Sine-Gordon Theories*, (with D. Bernard) Nucl. Phys. B340 (1990) 721.
16. *Fractional Supersymmetries in Perturbed Coset CFT's and Integrable Soliton Theories* (with C. Ahn and D. Bernard) Nucl. Phys. B346 (1990) 409.
17. *The Fractional Supersymmetric Sine-Gordon Models* (with D. Bernard) Phys. Lett. B247 (1990) 309.
18. *Taming the Integrable Zoo* Proceedings of the Argonne Workshop on Quantum Groups, Curtright, Fairlie and Zachos, eds, 1991, World Scientific, p. 247.

19. *On the Possibility of Fractional Superstrings* (with P. Argyres and H. Tye) , Phys. Lett. 253B (1991) 306.
20. *Quantum Symmetries of Perturbed Conformal Field Theory*, in Proceedings of the 25th International Conference on High Energy Physics, July 1990, Singapore, p. 501.
21. *Quantum Group Symmetries and Non-local Conserved Currents in 2D QFT,* (with D. Bernard), Commun. Math. Phys. 142 (1991) 99.
22. *Non-Local Currents in 2D QFT: An Alternative to the Quantum Inverse Scattering Method,* (with D. Bernard), proceedings of 'Quantum Groups' conference, Leningrad.
23. *Disorder and Parafermion Fields in 3D Gauge Theory,* Phys. Lett. B 264 (1991) 355.
24. *Infinite Quantum Group Symmetry of Fields in Massive 2D Quantum Field Theory,* (with F. Smirnov), Int. Jour. Mod. Phys. A7 (1992) 2997.
25. *Restricted Quantum Affine Symmetry and Perturbations of Minimal Conformal Models,* (with G. Felder), Int. Jour. Mod. Phys. A7, Suppl. 1A (1992) 239.
26. *Infinite Quantum Group Symmetry in 2d Quantum Field Theory,* in proceedings of XXth International Conference on Differential Geometric Methods in Theoretical Physics, June 1991, eds. S. Catto and A. Rocha, p. 551, World Scientific (1992).
27. *The Quantum Double in Integrable Quantum Field Theory,* (with D. Bernard), Nucl. Phys. B399 (1993) 709.
28. *S-Matrices for Perturbed N=2 Superconformal Models from Quantum Groups,* (with D. Nemmeshansky and N. Warner), Nucl. Phys. B 390 (1993), 653.
29. *Quantum Affine Symmetry as Generalized Supersymmetry,* (with C. Vafa), Nucl. Phys. B401 (1993) 413.
30. *Quantum Affine Symmetry at Roots of 1 as Generalized Supersymmetry,* in *Quantum Groups, Integrable Models and Statistical Systems*, J. LeTourneux and L. Vinet, eds., proceedings of NSERC conference, Kingston, Ontario, World Scientific.
31. *Spectrum Generating Affine Lie Algebras in Massive Field Theory*, Nucl. Phys. B415 (1994) 734.
32. *Differential Equations for Sine-Gordon Correlation Functions at the Free Fermion Point*, (with D. Bernard), Nucl. Phys. B426 (1994) 534.
33. *Form Factors from Vertex Operators and Correlation Functions at q=1*, in Recent Progress in Statistical Mechanics and Quantum Field Theory, P. Bouwknegt et. al. eds, World Scientific, 1995.
34. *Affine Lie Algebras in Massive Field Theory and Form Factors from Vertex Operators*, Theor. Math. Phys. 98 (1994) 297.
35. *Particle-Field Duality and Form Factors from Vertex Operators*, (with C. Efthimiou), Commun. Math. Phys. 171 (1995) 531.
36. *Form Factors from Vertex Operators and Correlation Functions at q=1*, in XIth International Congress of Mathematical Physics, Paris, July 1994, D. Iagolnitzer, ed.,

International Press Inc., 1995.

37. *Quantum Solitons in Non-linear Optics: Resonant Dielectric Media*, to appear in *Unified Symmetry: In the Small and in the Large II*, Coral Gables 1995 conference, B. N. Kursunoglu, S. Mintz and A. Perlmutter, eds. Plenum Publishing.
38. *Boundary Sine-Gordon Interactions at the Free Fermion Point* (with M. Ameduri and R. Konik), Phys. Lett. B354 (1995) 376.
39. *Short Distance Expansion of Sine-Gordon Correlation Functions* (with R. Konik), Nucl. Phys. B479 (1996), 619.
40. *Boundary Energy and Boundary States in Integrable Quantum Field Theories* (with G. Mussardo, H. Saleur and S. Skorik), Nucl. Phys. B453 [FS] (1995) 581.
41. *Quantum Theory of Self-Induced Transparency*, Nucl. Phys. B450 [FS] (1995) 753.
42. *Affine Lie Algebra Symmetry of Sine-Gordon Theory at Reflectionless Points*, (with. D. Nemeschansky), Mod. Phys. Lett. A/339/95.
43. *On Ising Correlation Functions with Boundary Magnetic Field*, (with R. Konik and G. Mussardo), Int. J. Mod. Phys. A11 (1996) 2765.
44. *QED for a Fibrillar Medium of Two-Level Atoms,* CLNS 96/1407, hep-th/9604100, Phys. Rev. A56 (1997) 782.
45. *Finite Temperature Correlations in the one-dimensional quantum Ising model*, with F. Lesage, S. Sachdev and H. Saleur, Nuclear Physics B482, 579 (1996), cond-mat/9606104.
46. *Exact Friedel Oscillations in the g=1/2 Luttinger Liquid*, with F. Lesage and H. Saleur, cond-mat/9606124, Phys. Rev. B54 (1996)13597.
47. *Scattering Theory of Oscillator Defects in an Optical Fiber*, with R. Konik, Phys. Rev. B58 (1998) 1872, hep-th/9701016.
48. *The Maxwell-Bloch Theory in Quantum Optics and the Kondo Model*, with F. Lesage, S. Lukyanov and H. Saleur, hep-th/9701022, Phys. Lett. A 235 (1997) 203.
49. *Purely Transmitting Defect Field Theories* with R. Konik, hep-th/9703085, Nucl. Phys. B538 (1999) 587.
50. *A 1D Model for N-Level Atoms Coupled to an EM Field* with Z. Bassi, hep-th/9703212, J.Math.Phys. 40 (1999) 3723-3731.
51. *Eigenstates of the Atom-Field Interactions and the Binding of Light in Photonic Crystals*, hep-th/9706150, Annals Phys. 271 (1999) 268.
52. *Erratum for: Differential Equations for Sine-Gordon Correlation Functions at the Free Fermion Point*, hep-th/9703055, Nucl. Phys. B 498 [FS] (1997) 619.
53. *Integrability of Coupled Conformal Field Theories*, with A. W. W. Ludwig and G. Mussardo, hep-th/9707159, Nucl.Phys.B512:523-542,1998.
54. *Minimal Models with Integrable Local Defects*, with A. Ludwig, hep-th/9708135, Nucl.Phys. B549 (1999) 546-562.

55. *The Kondo Model with a Bulk Mass Term*, with Z. Bassi, hep-th/9811138, Nucl.Phys. B552 (1999) 643-676.
56. *Exact Bound States for a Magnetic Impurity in a Superconductor*, with Z. Bassi, cond-mat/9811312, Phys. Rev. B 60 (1999) 615-619.
57. *Finite Temperature Correlation Functions in Integrable QFT*, with G. Mussardo, hep-th/9902075, Nucl.Phys. B552 (1999) 624-642.
58. *Angular Quantization of the Sine-Gordon Model at the Free Fermion Point*, with S. Khoroshkin and S. Pakuliak, hep-th/9904082, Adv. Theor. Math. Phys. (1999) Vol. 3 No. 5.
59. *Gauge Invariance and the Critical Properties of Quantum Hall Plateaux Transitions*, cond-mat/9904414, Phys. Rev. B 61 (2000) 10917.
60. *On the Relevance of Disorder for Dirac Fermions with Imaginary Vector Potential*, cond-mat/9905222, Phys.Rev.Lett.84:1292-1295,2000.
61. *Plateaux Transitions from S-matrices based on SL(2,Z) Invariant Field Theories*, with I. Devetak, hep-th/9906138, Phys.Lett.B467:78-82,1999.
62. $gl(N|N)$ *Super-Current Algebras for Disordered Fermions*, with S. Guruswamy and A. Ludwig, cond-mat/9909143, Nucl.Phys. B583 (2000) 475-512.
63. *The Exact S-matrix for an* $osp(2|2)$ *Disordered System*, (with Z. Bassi), hep-th/9911105, Nucl. Phys. B578 (2000) 577.
64. *Spin-Charge Separation and the Spin Quantum Hall Effect*, (with D. Bernard), cond-mat/0003075, Phys.Rev. B64 (2001) 045306.
65. *On the beta function for anisotropic current interactions in 2D*, (with B. Gerganov and M. Moriconi), Phys. Rev. Lett. 86 (2001) 4753, hep-th/0011189.
66. *Strong coupling fixed points of current interactions and disordered Dirac fermions in 2D*, cond-mat/0011413, Phys. Rev. B64 (2001) 045329.
67. *Strong-weak coupling duality for current interactions in 2d*, with D. Bernard, Phys. Lett. B512 (2001) 78.
68. *Renormalization group for network models of Quantum Hall transitions*, with D. Bernard, Nucl.Phys.B628:442-472,2002.
69. *Chiral stabilization of the renormalization group for flavor and color anisotropic current interactions, Phys.Lett. B519 (2001) 183-187.*
70. *A Classification of random Dirac fermions*, with D. Bernard, cond-mat/0109552, J. Phys A35 (2002) 2555-2567.
71. *A Classification of Non-Hermitian Random Matrices*, with D. Bernard, proceedings of the NATO Advanced Research Workshop on Statistical Field Theories, Como 18-23 June 2001.
72. *Russian Doll Renormalization Group and Superconductivity*, with J.-M. Román and G. Sierra, Phys. Rev. **B69** (2004) 20505, cond-mat/0211338.

73. *Russian Doll Renormalization Group, Kosterlitz-Thouless Flows, and the Cyclic sine-Gordon model*, with J.-M. Román and G. Sierra, Nucl.Phys. **B675** (2003) 584, hep-th/0301042.
74. *Log-periodic behavior of finite size effects in field theories with RG limit cycles*, with J.-M. Román and G. Sierra, Nucl.Phys. **B700** (2004) 407-435 hep-th/0312141.
75. *Renormalization group limit cycles and field theories for elliptic S-matrices*, with G. Sierra, J. Stat. Mech. (2004) P08004 hep-th/0403178.
76. *Quasi-particle re-summation and integral gap equation in thermal field theory*, hep-th/0409049, JHEP 0505 (2005) 068.
77. *The elementary excitations of the exactly solvable Russian doll BCS model of superconductivity*, with A. Anfossi and G. Sierra, cond-mat/0503014, J.Stat.Mech. 0505 (2005) P011.
78. *Quantum critical spin liquids and conformal field theory in 2+1 dimensions*, arXiv:cond-mat/0610639.
79. *Quantum critical spin liquids and superconductivity in the cuprates*, arXiv:cond-mat/0610816.
80. *3D Ising and other models from symplectic fermions*, arXiv:cond-mat/0610817.
81. *Interacting Bose and Fermi gases in low dimensions and the Riemann hypothesis*, Int. J. Mod. Phys. **A23** (2008) 1371 arXiv:math-ph/0611043.
82. *Quantum statistical mechanics of gases in terms of dynamical filling fractions and scattering amplitudes*, arXiv:hep-th/0611187, J. Phys. A. Math. Theor. 40 (2007) 9655.
83. *Semi-Lorentz invariance, unitarity, and critical exponents of symplectic fermion models*, with M. Neubert, JHEP 10 (2007) 027 arXiv:0705.4657.
84. *The gl(1—1) super-current algebra: the role of twist and logarithmic fields*, arXiv:0710.2906, Adv. Theor. Math. Phys. (13) 2009.
85. *Critical points of 2d disordered Dirac fermions: the Quantum Hall Transitions revisited* arXiv:0710.3778.
86. *A unique non-Landau/Fermi liquid in* 2*d for high* T_c *superconductivity*, with E. Kapit, arXiv:0805.2951
87. *A model of a* 2*d non-Fermi liquid with* $SO(5)$ *symmetry, AF order, and a d-wave SC gap*, with E. Kapit, arXiv:0805.4182, J. Phys. **A42** (2009) 025402.
88. *Non-Fermi liquid properties of 2d symplectic fermions: the role of a dynamically generated (pseudo)-gap*, with E. Kapit, arXiv:0903.2484
89. *Super Spin-Charge Separation for class A, C, and D disorder*, with D. Robinson, J. Phys. A: Math. Theor. 41 (2008) 452002.
90. *Critical point of the two-dimensional Bose gas: an S-matrix approach*, with P.-T. How, Nucl. Phys. B824 (2010) 415.
91. *S-matrix approach to quantum gases in the unitary limt I: the two-dimensional case*, with P.-T. How, arXiv:1001.1121, J. Stat. Mech. 1003:P03025 (2010).

92. *S-matrix approach to quantum gases in the unitary limt II: the three-dimensional case*, with P.-T. How, arXiv:1004.5390, J. Stat. Mech. (2010) P07001.
93. *Thermodynamics of the two-dimensional Hubbard model in the two-body scattering approximation*, Braz. J. Phys. **42** (2012) 28, arXiv:1007.1195.
94. *Superconductivity in the two-dimensional Hubbard model based on the exact pair potential*, arXiv:1008.5116
95. *On the viscosity to entropy density ratio for unitary Bose and Fermi gases*, New. J. Phys. **13** (2011) 055015, arXiv:1012.5653, invited article for a special issue devoted to cold atoms.
96. *Possible Cooper instabilities in pair Green functions of the two-dimensional Hubbard model*, arXiv:1107.5272.
97. *Edge states for topological insulators in two dimensions and their Luttinger-like liquids*, with D. Bernard and Eun-Ah Kim, Phys. Rev. B86 (2012) 205116 [arXiv:1202.5040].
98. *Quantum Bose and Fermi gases with large negative scattering length in the 2-body S-matrix approximation*, with E. Marcelino, A. Nicolai and I. Roditi, Phys. Rev. A **86** 2012 02360 [arXiv:1205.0234].
99. *Holographic classification of Topological Insulators and its 8-fold periodicity*, with D. Bernard, J. Phys. A: Math. Theor. **45** (2012) 435203, arXiv:1205.3810.
100. *Scrutinizing the Cosmological Constant Problem and a proposal*, with D. Bernard, Phys. Rev. **D87**, 063010 (2013), arXiv:1211.4848
101. *An electrostatic depiction of the validity of the Riemann Hypothesis and a formula for the N-th zero at large N,* Int. J. Mod. Phys. A28 (2013) 1350151 [arXiv:1305.2613].
102. *Statistical and other properties of Riemann zeros based on an explicit equation for the n-th zero on the critical line,* (with G. França). arXiv:1307.8395 (math.NT).
103. *On the zeros of L-functions*, (with G. França), arXiv:1309/7019 (math.NT).
104. *Virial coefficients for Bose and Fermi trapped gases beyond the unitary limit: an S-Matrix approach*, Phys. Rev. A90, 053619 (2014). (with E. Marcelino, A. Nicolai, and I. Roditi)
105. *A theory for the zeros of Riemann zeta and other L-functions, lectures delivered at Riemann Center, Hannover, Germany. 100 pages. arXiv:1407.4358, (with G. Franca).*
106. *On the validity of the Euler product inside the critical strip, (with G. Franca), arXiv: 1410.3520*
107. *Transcendental equations satisfied by the individual zeros of Riemann Zeta, Dirichlet and modular L-functions, (with G. Franca), Communications in Number Theory and Physics , 9(1):1-49, 2015, arXiv: 1502.06003[math.NT]*
108. *An asymptotic upper bound on prime gaps,, arXiv:1506.03359.*
109. *Some Riemann Hypotheses from Random Walks over Primes , (with G. França), arXiv:1509.03643.*

110. Riemann Hypothesis and Random Walks: the Zeta case, arXiv:1601.00914.