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ACADEMIC QUALIFICATIONS

- * *Ph.D. in Physics* August 1990
Physics Department
Universidad Nacional de La Plata, Argentina.
- * *Licenciado en Física (MSc)* May 1987
Physics Department
Universidad Nacional de La Plata, Argentina.

CURRENT POSITION

Senior Lecturer 2016 - present
Physics Department, Northeastern University

PREVIOUS POSITIONS

- Lecturer* 2011 - 2016
Physics Department, Northeastern University
- Visiting Professor* 2010 - 2011
Physics Department, Northeastern University
- Visiting Associate Professor* 2003 - 2010
Department of Physics, West Virginia University
- Investigador CONICET* 1998 - 2009
Argentina
- Associate Professor* 1999 - 2007
Mathematics Department, University of La Plata
- Research Associate* July 1995 - June 1999
Baruch College and City College
City University of New York
- Postdoctoral Research Associate* October 1993 - June 1995
Department d'Estructura i Constituents de la Matèria
Universitat de Barcelona, Barcelona, Spain.
- Postdoctoral Research Associate* July 1990 - August 1992
Department of Physics
University of Illinois at Urbana-Champaign.

TEACHING AWARDS

Recipient of the 2014 Outstanding Teachers of First Year Engineering Students Award.
College of Engineering, Northeastern University, 2014

Recipient of the 2012 Outstanding Teachers of First Year Engineering Students Award.
College of Engineering, Northeastern University, 2012

PhD THESIS ADVISOR

Advisor of the PhD Thesis of Diego Correa 2000 - 2003
Physics Department
Universidad Nacional de La Plata, Argentina.

MSc THESIS ADVISOR

Co-advisor of the MSc Thesis of Nicolás Grandi December 1999
Physics Department
Universidad Nacional de La Plata, Argentina.

FELLOWSHIPS AND GRANTS

Research Fellowship April 1988 - June 1990
CONICET, Argentina.

Research Fellowship November 1987 - March 1988
CICPBA, Argentina.

Research Grant 2000, 2001, and 2002
Fundación Antorchas

PUBLICATIONS

- 1— *Consistent quantization of non-linear sigma models coupled to Weyl fermions*, E. F. Moreno, M. C. von Reichenbach, F. A. Schaposnik, *Int. Jour. of Mod. Phys. A* **4**, 2797 (1989).
- 2— *Issues of symmetries in the Gross-Neveu model*, E. F. Moreno, F. A. Schaposnik, *Int. Jour. of Mod. Phys. A* **4**, 2827 (1989).
- 3— *Conformally invariant constrained fermion models*, D. C. Cabra, E. F. Moreno, M. C. von Reichenbach, *Int. Jour. of Mod. Phys. A* **5**, 2313 (1990).
- 4— *Conformal charge of constrained fermion models in non-trivial topological backgrounds*, D. Cabra, E. F. Moreno, *J. Phys. A* **23**, 4711 (1990).
- 5— *Equivalence of the path integral theory of spinning particles and the topological non-linear sigma model in $d=2$ dimensions*, E. Fradkin, E. F. Moreno, F. A. Schaposnik, *Phys. Rev. D* **45**, 595 (1992).

- 6– *Constrained fermion models and generalized coset construction* D. C. Cabra, E. F. Moreno, F. A. Schaposnik, *Mod. Phys. Lett. A* **7**, 1129 (1992).
- 7– *Constrained fermionic models in non-trivial topological sectors*, E. F. Moreno, *Mod. Phys. Lett. A* **7**, 2179 (1992).
- 8– *Ground state wave functionals for 1 + 1-dimensional fermion field theories*, E. Fradkin, E. F. Moreno, F. A. Schaposnik, *Nucl. Phys. B* **392**, 667 (1993).
- 9– *Functional determinant and Green functions for a fermionic gauge theory on the disk*, E. F. Moreno, *Phys. Rev. D* **48**, 921 (1993).
- 10– *Gradients flows from an approximation to the exact renormalization group*, P. E. Haagensen, Y. Kubyshin, J. I. Latorre, E. F. Moreno, *Phys. Lett. B* **323**, 330 (1994).
- 11– *Thirring model with non-conserved chiral charge*, D. C. Cabra, E. F. Moreno, C. Naón, *Nucl. Phys. B* **424**, 567 (1994).
- 12– *Scheme independence and the Exact Renormalization Group*, R. Ball, P.E. Haagensen, J. I. Latorre, E. F. Moreno, *Phys. Lett. B* **347**, 80 (1995).
- 13– *Bosonization rules in 1/2 + 1 dimensions*, M. Fuentes, A. Lopez, E. Fradkin, E. F. Moreno, *Nucl. Phys. B* **450**, 603 (1995).
- 14– *Duality in deformed coset fermionic models*. D. C. Cabra, E. F. Moreno, *Nucl. Phys. B* **475**, 522 (1996).
- 15– *Exact renormalization group study of fermionic theories*, J. Comellas, Yu. Kubyshin, E. F. Moreno, *Nucl. Phys. B* **490**, 653 (1997).
- 16– *Non Abelian Bosonization in Two and Three Dimensions*, J.C. Le Guillou, E. F. Moreno, C. Núñez, F.A. Schaposnik, *Nucl. Phys. B* **484**, 682 (1997).
- 17– *On Three-Dimensional Bosonization*, J.C. Le Guillou, E.F. Moreno, C. Nuñez, F.A. Schaposnik, *Phys. Lett. B* **409**, 257 (1997).
- 18– *Duality Between Topologically Massive and Selfdual Models*, J.C. Le Guillou, E. F. Moreno, C. Nuñez, F.A. Schaposnik, *Mod. Phys. Lett. A* **12**, 2707 (1997).
- 19– *Electrically charged vortex solution in Born-Infeld theory*, E. F. Moreno, C. Nunez, F.A. Schaposnik, *Phys. Rev. D* **58**, 025015 (1998).
- 20– *Quasiparticle Operators with Nonabelian Braiding Statistics*, D. C. Cabra, E. F. Moreno, G. L. Rossini, *Phys. Lett. B* **437**, 362 (1998).
- 21– *On the renormalization of Hamiltonians*, G. Alexanian, E. F. Moreno, *Phys. Lett. B* **450**, 149 (1999).
- 22– *Monopoles in Non-abelian Dirac-Born-Infeld theory*, N. Grandi, E. F. Moreno, F. Schaposnik, *Phys. Rev. D* **59**, 125014 (1999).
- 23– *Barrier penetration in (1+1)-dimensional O(N) Sigma Models*, E. F. Moreno, P. Orland, *JHEP* **9904:002**, (1999).
- 24– *Remarks on Goldstone bosons and hard-thermal loops*, G. Alexanian, E. F. Moreno, V. P. Nair, R. Ray, *Phys. Rev. D* **60**, 011701 (1999).
- 25– *Renormalization of the Hamiltonian and Geometric Interpretation of Asymptotic Freedom*, G. Alexanian, E. F. Moreno. *Phys. Rev. D* **60**, 105028 (1999).
- 26– *Monopole solutions in anti-de Sitter space*, A. R. Lugo, E. F. Moreno, F. A. Schaposnik. *Phys. Lett. B* **473**, 35 (2000).

- 27– *The Wess-Zumino-Witten term in noncommutative two-dimensional fermion models*, E.F. Moreno, F.A. Schaposnik. *JHEP* 0003:032 (2000).
- 28– *Wess-Zumino-Witten and fermion models in noncommutative space*, E.F. Moreno, F.A. Schaposnik. *Nucl. Phys.* **B 596** 439 (2001).
- 29– *Self-dual Ginzburg-Landau vortices in a disk*, G.S.Lozano, M.V.Manias, E.F.Moreno. *Jour. Phys.* **A 34**, 5721 (2001).
- 30– *Nielsen-Olesen vortices in noncommutative space*, G.S. Lozano, E.F. Moreno, F.A. Schaposnik. *Phys. Lett.* **B504**, 117 (2001).
- 31– *Selfdual chern-simons solitons in noncommutative space*, . G.S. Lozano, E.F. Moreno, F.A. Schaposnik. *JHEP* 0102:036 (2001).
- 32– *Comments on the $u(2)$ noncommutative instanton*, D.H. Correa G.S. Lozano, E.F. Moreno, F.A. Schaposnik. *Phys. Lett.* **B515**, 206 (2001).
- 33– *Particle Vortex dynamics in noncommutative space*, D.H. Correa G.S. Lozano, E.F. Moreno, F.A. Schaposnik. *JHEP* 0111:034 (2001).
- 34– *Renormalization of hamiltonian*, G.G. Alexanian, E.F. Moreno. *Int. Jour. Mod. Phys.* **A16**, 1983 (2001).
- 35– *Anomalies in Noncommutative Dipole Field Theories*, D.H.Corraea, G.S.Lozano, E. F. Moreno, F.A.Schaposnik. *JHEP* 0202:031 (2002).
- 36– *Noncommutative fermions and Morita equivalence*, D.H. Correa, E.F. Moreno. *Phys. Lett.* **B534**, 185 (2002).
- 37– *Some noncommutative multiinstantons from vortices in curved space*, D.H. Correa, E.F. Moreno, F.A. Schaposnik. *Phys. Lett.* **B543**, 235 (2002).
- 38– *PP waves from BPS supergravity monopoles*, D. H. Correa, E. F. Moreno, S. Reullion, F. A Schaposnik. *Phys. Lett.* **B552**, 280 (2003).
- 39– *Dyons in $N=4$ gauged supergravity*, D. H. Correa, A. D. Medina, E. F. Moreno, F. A Schaposnik. *Phys. Rev.* **D68**, 105008 (2003).
- 40– *Non BPS noncommutative vortices*, G.S. Lozano, E.F. Moreno, M.J. Rodríguez, F.A. Schaposnik. *JHEP* 0311:049 (2003).
- 41– *A note on Gaussian integrals over Paragrassmann variables*, L. F. Cugliandolo, G. S. Lozano, E. F. Moreno, F. A. Schaposnik. *Int. Jour. Mod. Phys.* **A19**, 1705 (2004).
- 42– *A monopole solution from noncommutative multi-instantons*, D. H. Correa, P. Forgacs, E. F. Moreno, F. A. Schaposnik, G. A. Silva. *JHEP* 0407:037 (2004).
- 43– *Bogomolny equations for vortices in the noncommutative torus*, P. Forgacs, G. S. Lozano, E. F. Moreno, F. A. Schaposnik. *JHEP* 0507:074 (2005).
- 44– *Spherically symmetric monopoles in noncommutative space*, E. F. Moreno. *Phys. Rev.* **D72**, 045001 (2005).
- 45– *Para-Grassmann variables and coherent states.*, D. C. Cabra, E. F. Moreno, A. Tanasa. *SIGMA* **2**, 087 (2006).
- 46– *String solutions in Chern-Simons-Higgs model coupled to an axion*, J. Lopez-Sarrion, E. F. Moreno, F. A. Schaposnik, D. Slobinsky. *Phys. Rev.* **D73**, 125007 (2006).
- 47– *Non-Abelian Chern-Simons Vortices*, G. S. Lozano, D. Marqués, E. F. Moreno, F. A. Schaposnik. *Phys. Lett.* **B654**, 27 (2007).

- 48– *Structure of the vacuum in deformed supersymmetric chiral models*, P. Fernandez, E. F. Moreno, F. A. Schaposnik. *JHEP* **07**, 084 (2008).
- 49– *Local and semi-local vortices in the YangMills ChernSimons model*, M. Buck, E. F. Moreno, F. A. Schaposnik. *J. Phys. A* **42**, 205401 (2009).
- 50– *BPS equations and the stress tensor*, E. F. Moreno, F. A. Schaposnik. *Phys. Lett.* **B673**, 72 (2009).
- 51– *R-symmetry and supersymmetry breaking at finite temperature*, E. F. Moreno, F. A. Schaposnik. *JHEP* **10**, 007 (2010).
- 52– *Holographic phase transition from dyons in an AdS black hole background*, A. R. Lugo, E. F. Moreno, F. A. Schaposnik. *JHEP* **03**, 013 (2010).
- 53– *Holography and AdS₄ self-gravitating dyons*, A. R. Lugo, E. F. Moreno, F. A. Schaposnik. *JHEP* **11**, 081 (2010).
- 54– *A Note on Holography and Phase Transitions*, M. Bellon, E. F. Moreno, F. A. Schaposnik. *Advances in High Energy Physics* **2011**, 917127, (2011).
- 55– *Q-boson coherent states and para-Grassmann variables for multi-particle states*, R. A. Ramirez, G. L. Rossini, D. C. Cabra, E. F. Moreno. *J. Phys. A* **45**, 485304, (2012).
- 56– *Fermions in an AdS₃ black hole background and the gauge-gravity duality*, C. D. Fosco, E. F. Moreno, F. A. Schaposnik. *Phys. Rev.* **D85**, 046005 (2012).
- 57– *Dualities and bosonization of massless fermions in three-dimensional space-time*, E. F. Moreno, F. A. Schaposnik. *Phys. Rev.* **D88**, 025033 (2013).
- 58– *Bosonization of fermions coupled to topologically massive gravity*, E. Fradkin, E. F. Moreno, F. A. Schaposnik. *Phys. Lett.* **B730**,284 (2014).

PROCEEDINGS OF SCIENTIFIC MEETINGS

- * *Cuantificación consistente de modelos sigma no-lineales acoplados a fermiones de Weyl*. M. C. von Reichenbach, E. F. Moreno, F. Schaposnik. 73 Reunión de la Asociación Argentina de Física. Mar del Plata, octubre de 1988.
- * *Cuantificación consistente de modelos sigma no-lineales acoplados a fermiones de Weyl*. M. C. von Reichenbach, E. F. Moreno, F. Schaposnik. IV Reunión de la Sociedad Chilena de Física. Santiago de Chile, Chile, diciembre de 1988.
- * *The spin model in d=1 dimensions and the topological non-linear sigma model in d=2 dimensions*. E. Fradkin, E. F. Moreno, F. Schaposnik. XXth International Conference on Differential Geometric Methods in Theoretical Physics. New York, U.S.A., junio de 1991.
- * *The Exact Renormalization Group and approximations*, P. E. Haagensen, Yu. Kubyshev, J. I. Latorre, E. Moreno, *Proceedings of "Quarks '94" International Seminar. Vladimir, Moscow*, World Scientific Co., Singapore, 1994.
- * *Multidimensional Einstein-Yang-Mills cosmological models*, Yu. Kubyshev, J. I. Pérez Cadenas and E. F. Moreno, *Proceedings of "Trobades Científiques de la Mediterrania . Encuentro Relativistas Españoles '94". Máo, Spain*.
- * *Approximate solutions in scalar and fermionic theories within the Exact Renormalization Group approach*, J. Comellas, Yu. Kubyshev, E. F. Moreno, *10th International Workshop on High Energy Physics and Quantum Field Theory, Zvenigorod, Russia, 19-26 Sep 1995*.
- * *Potential Topography And Mass Generation*, M. Kudinov, E. F. Moreno, P. Orland, *NATO*

Advanced Research Workshop on Theoretical Physics: New Developments in Quantum Field Theory, Zakopane, 1997.

* *On the renormalization of hamiltonians*, G. Alexanian, E. F. Moreno, *MRST 2000 Conference on Theoretical and High-Energy Physics. Rochester, NY, 8-9 May 2000.*

* *Renormalization of hamiltonian*, G.G. Alexanian, E.F. Moreno. *2nd Conference on Exact Renormalization Group, Rome, Italy, 18-22 Sep 2000.*

* *Fermionic Theories in Noncommutative Space*, E.F. Moreno. *Continuous Advances in QCD 2004, Minneapolis, MN, U.S.A., 13-16 May 2004.*

REFEREEING EXPERIENCE

Referee *Physical Review Letters* Since 1999

Referee *Physical Review D* Since 1999

Referee *Journal of Physics A* Since 2001