

CURRICULUM VITAE

Studies:

1978-1982, Physics Department, Shandong Normal University

1983-1986, Physics Department, Beijing Normal University

1987-1990, Physics Department, Beijing Normal University

Work experiences:

1. Post-doctoral, 1990- 1991, Institute of Theoretical Physics, Academia Sinica, Beijing, China
2. Post-doctoral, 1991- 1992, Instituto de Física. Lab. de Cuernavaca, Universidad Nacional Autónoma de México
3. Cátedra Patrimonial de Excelencia Nivel II, 1994- 1996, Facultad de Ciencias de la Universidad Autónoma del Estado de Morelos, México
4. Profesor-researcher, 1996-2000, Facultad de Ciencias de la Universidad Autónoma del Estado de Morelos, México
5. Professor Titular C, 1997-present, Departamento de Física, Universidad Metropolitana-Iztapalapa, Mexico
6. Visiting Researcher, 2001-2002, Mathematics Research Institute, University of Montreal, Montreal, QC, Canada

Teaching:

1. mecánica estadística, sep.1993-feb. 1994, posgrado, FC-UAEM
2. mecánica estadística, sep.1994-feb. 1995, posgrado, FC-UAEM
3. física teórica III, feb. 1995-agosto 1995, licenciatura, FC-UAEM
4. álgebra lineal II, feb. 1995-agosto 1995, licenciatura, FC-UAEM
5. mecánica estadística, feb.1996-agosto 1996, posgrado, FC-UAEM
6. física teórica III, sep. 1996-feb. 1997, licenciatura, FC-UAEM
7. teoría del liquido, sep. 1996-feb. 1997, licenciatura, FC-UAEM
8. mecánica estadística, feb.1997-agosto 1997, posgrado, FC-UAEM
9. mecánica estadística, sep.1997-ene. 1998, posgrado, FC-UAEM
10. mecánica estadística, feb.1998-julio 1998, posgrado, FC-UAEM
11. termodinámica I, sept. 1998-dic 1998, licenciatura, UAM-I
12. termodinámica II, ene. 1999-abr. 1999, licenciatura, UAM-I
13. mecánica I, ene. 1999-abr. 1999, licenciatura, UAM-I
14. mecánica II, mayo 1999-julio 1999, licenciatura, UAM-I
15. temas selectos en termodinámica, mayo 1999-julio 1999, licenciatura, UAM-I
16. proyecto terminal, sept. 1999-dic. 1999, licenciatura, UAM-I
17. termodinámica estadística, ago. 1999-ene. 2000, licenciatura, FC-UAEM
18. mecánica estadística, feb.1999-jul. 1999, posgrado, FC-UAEM

19. mecánica I, enero 2000-abril 2000, licenciatura, UAM-I
20. mecánica II, mayo 2000-agosto 2000, licenciatura, UAM-I
21. termodinámica I, sept. 2000-dic. 2000, licenciatura, UAM-I
- 22 FISICA IV, sept. 2000-dic. 2000, licenciatura, UAM-I
- 23 temas selectos de mecánica analítica, sept. 2000-dic. 2000, licenciatura, UAM-I
- 24 mecánica estadística, sept. 2000-feb. 2001, licenciatura, FC-UAEM
- 25 Fisica IV, UAM-I, (2001)
- 26 Temas selectos de Fisica, UAM-I, (2001)
- 27 Seminario de Fisica avanzada, UAM-I, (2001)
- 28 Temas selectos de termodinámica, UAM-I (2002)
- 29 Temas selectos de mecánica analítica, UAM-I (2002)
- 30 Fisica I, UAM-I (2003)
- 31 Fisica IV, UAM-I (2003)
- 32 Fisica IV, UAM-I (2003)
- 33 Física I, UAM-I (2004)
- 34 Física IV, UAM-I (2005)
- 35 MECANICA I, UAM-I (2005)
- 36 MECANICA II, UAM-I (2005)
- 37 MECANICA I, UAM-I (2006)
- 38 INTRODUCCION A LA FISICA MODERNA, UAM-I (2006)
- 39 VARIABLES COMPLEJAS, UAM-I, (2006)
- 40 FUNDAMENTO DE FISICA, UAM-I, (2007)
- 41 FUNDAMENTO DE FISICA, UAM-I, (2007)
- 42 FUNDAMENTO DE FISICA, UAM-I, (2007)
- 43 FUNDAMENTO DE FISICA, UAM-I, (2008)
- 44 FISICA I, UAM-I, (2008)
- 45 FUNDAMENTO DE FISICA, UAM-I, (2008)
- 46 FUNDAMENTO DE FISICA, UAM-I (2009)
- 47 FUNDAMENTO DE FISICA, UAM-I (2009)
- 48 FISICA I. UAM-I (2009)
- 49 FUNDAMENTO DE FISICA, UAM-I, (2010)
- 50 FUNDAMENTO DE FISICA, UAM-I, (2010)
- 51 FUNDAMENTO DE FISICA, UAM-I, (2010)
- 52 FISICA I. UAM-I (2010)

Publications

1. Yu Jiang and Hu Gang, "Invariant measure for non-fully-developed chaos in tent maps", Chinese Phys. Lett. 3 357(1986)
2. Yu Jiang and Hu Gang, "Exact solution of the invariant density for the piecewise linear approximation to cubic maps", J. Phy. A21, 2717(1988)
3. Yu Jiang, "Exact solution of invariant measure for tent maps", J. Beijing Normal University(Science), 12, 33(1988)

4. Yu Jiang and Hu Gang, "An analytical study on the scaling properties of diffusion-limited aggregation in external fields", *Acta Fisica Sinica*, 37, 1486(1988)
5. Hu gang and Yu Jiang, "Clustre size distribution in irreversible polymerization Clustre size distribution in irreversible polymerization", *J. Beijing Normal University(Science)*, 1, 51(1989)
6. Yu Jiang and Hu Gang, "The scaling property of DLA clusters with anisotropic diffusion", *Acta Fisica Sinica*, 38, 202(1989)
7. Yu Jiang, Hu Gang and Ma Benkun, "Critical behavior of the generalized smoluchowski coagulation equation", *Commun. Theor. Phys.* 12, 385(1989)
8. Yu Jiang and Hu Gang, "Gelation in generalized smoluchowski equation", *Commun. Theor. Phys.* 11, 255(1989)
9. Yu Jiang, Hu Gang and Ma Benkun, "A new growth model: screened Eden model", *Phys. Rev. B* 39 4572(1989)
10. Yu Jiang and Hu Gang, "Generalized smoluchowski equation with gelation", *Phys. Rev. B* 39, 4659(1989)
11. Yu Jiang and Hu Gang, "Long-time behavior of the cluster size distribution in joint coagulation processes", *Phys. Rev. B* 40 661(1989)
12. Yu Jiang, Hu Gang and Ma Benkun, "Critical property and universality in the generalized smoluchowski coagulation equation", *Phys. Rev. B* 41 9424(1990)
13. Yu Jiang and F. Leyvraz, "Scaling theory for ballistic aggregation", *J. Phys.* AL179
14. Yu Jiang, "Kinetics of coagulation process in an idealized fluid", *Chem. Phys. Lett.* 224, 305(1994)
15. F. Leyvraz, E. Ben-Naim, Yu Jiang and S. Redner, "Ballistic aggregation and annihilation phenomena, Lectures on thermodynamic and statistical mechanics", P.154, (World Scientific, 1994)
16. Yu Jiang and F. Leyvraz, "Kinetic properties of ballistic aggregation", *Phys. Rev. E* 50, 2148(1994)
17. Yu Jiang and F. Leyvraz, "Kinetics of two-species ballistic annihilation", *Phys. Rev. E* 50, 608(1994)
18. Yu Jiang, "Scaling theory for multi-polymer coagulation", *Phys. Rev. E* 50, 4901(1994)
19. Yu Jiang, "Large-time behavior of the generalized smoluchowski coagulation equation", *Phys. Rev. E* 51, 1757(1995)
20. Marcelo Lozada-Cassou, Wilmer Olivares, "Belky Sulbaran and Yu Jiang, Violation of the electroneutrality condition in confined unsymmetrical electrolytes", *Physica A* 231, 197(1996)
21. Yu Jiang, "The interaction between two charged plates in electrolyte solutions", *Chem. Phys. Lett.* 263, 317(1996)
22. Yu Jiang, "Instantaneous gelation in the generalized smoluchowski coagulation equation", *J. Phys.* A29, 7893(1996)
23. Marcelo Lozada-Cassou and Yu Jiang, "Correlation of charged fluids separated by a wall", *Phys. Rev. Lett.* 77, 4019(1996)

24. P. Parmananda and Yu Jiang, "Controlling localized spatiotemporal chaos in a one-dimensional coupled map lattice", *Phys. Lett. A* 231, 159(1997)
25. Yu Jiang, "Phase transition in two-variable coupled map lattices", *Phys. Rev. E* 56, 2672(1997)
26. Yu Jiang, A. Antillon, P. Parmananda and J. Escalona, "Selection and stabilization of spatiotemporal patterns in two-dimensional coupled map lattices", *Phys. Rev. E* 56, 2568(1997)
27. Marcelo Lozada-Cassou and Yu Jiang, "Correlation of charged fluids separated by a wall of finite thickness: Dependence on the charge of the fluid and the wall", *Phys. Rev. E* 56, 2958(1997)
28. Yu Jiang, L. Degreve and Marcelo Lozada-Cassou, "Charge separation in confined charged fluids", *Phys. Rev. Lett.* 79, 3656(1997)
29. Yu Jiang and P. Parmananda, "Spatial coherence in an open flow model", *Phys. Rev. E* 57 Rapid Communication, R2499(1998)
30. Yu Jiang and P. Parmananda, "Synchronization of spatiotemporal chaos in asymmetrically coupled map lattices", *Phys. Rev. E* 57, 4135(1998)
31. Yu Jiang, "Collective behavior of coupled map lattices with asymmetrical couplings", *Phys. Lett. A* 240, 60(1998)
32. P. Parmananda and Yu Jiang, "Synchronization of chemical systems using external forcing", *J. Phys. Chem.* 102, 4532(1998)
33. P. Parmananda and Yu Jiang, "Synchronization of spatiotemporal chemical chaos using random signals", *Phys. Lett. A* 241, 173(1998)
34. G. Germán and Yu Jiang, "String effective potential with massive ends, Proceedings of the 1997 Workshop on particles and fields", Morelia, Mich., Mexico, Edited by J. C. de Olivo(1998)
35. G. Germán and Yu Jiang, "The quark mass correction to the string potential", *Euro. Phys. J. C* 8, 689 (1999)
36. Yu Jiang, A. Antillon, and J. Escalona, "Globally coupled maps with sequential updating", *Phys. Lett. A* 263, 132 (1999)
37. Yu Jiang, "Trajectory selection in multistable systems using periodic drivings", *Phys. Lett. A* 264, 22 (1999)
38. Yu Jiang, A. Antillon, and J. Escalona, "Numerical study of globally coupled maps with sequential updating", *Phys. Rev. E* 61, 4614, (2000)
39. J. Escalona, A. Antillon, M. Torres, Yu Jiang, and P. Parmananda, "Chaos in the Chern-Simons-Higgs theory with anomalous magnetic moment", *Chaos* 10, 337 (2000)
40. Yu Jiang, "Globally coupled maps with time-delayed interaction", *Phys. Lett. A* 267, 342 (2000)
41. G.E. Aguilar, M. Lozada-Cassou, and Yu Jiang, 'Fluid-fluid correlation through a model charged membrane: analytical results', *J. Colloid and Interface Science* 254, 141 (2002)
42. Yu Jiang and M. Lozada-Cassou, "Emergent dynamics of recurrently coupled neurons", *Phys. Lett. A* 307, 129 (2003)

43. Yu Jiang, M. Lozada-Cassou, and A. Vinet, 'Synchronization and symmetry-breaking bifurcation in constructive networks of coupled chaotic oscillators', *Phys. Rev. E* 68, 055200 (2003)
44. S.H. Dong, X.Y. Gu, Z.Q. Ma, and J. Yu, 'The Klein-Gordon equation with a Coulomb potential in D dimensions', *Int. J. Mod. Phys. E* 12, 555 (2003)
45. Z.Q. Ma, S.H. Dong, X.Y. Gu, J. Yu and M. Losada-Cassou, 'The Klein-Gordon equation with Coulomb plus a scalar potential in D dimensions', *Int. J. Mod. Phys. E* 13, 597 (2004)
46. Yu Jiang, S.H. Dong, and G.H. Sun, 'Series solutions of Schrodinger equation with position-dependent mass for the Morse potential', *Phys. Lett. A* 322, 290 (2004)
47. Yu Jiang, and S.H. Dong, 'Exactly solvable potentials for the Schrodinger equation with spatially dependent mass', *Phys. Lett. A* 325, 194 (2004)
48. S.H. Dong, G.H. Sun, and J. Yu, 'The Wigner function for a quantum system with an infinitely deep square-well potential', *Physica Scripta*, 70, 207 (2004)
49. Yu Jiang, S.H. Dong, and M. Losada-Cassou, 'Noise-induced coherence in bistable systems with multiple time delays', *Phys. Rev. E* 69, 056225 (2004)
50. Yu Jiang, S.H. Dong, and M. Losada-Cassou, 'Periodic precursors of nonlinear dynamical transitions', *Phys. Rev. E* 70, 026214 (2004)
51. Yu Jiang, S.H. Dong, and M. Losada-Cassou, 'Complex dynamics in a periodically perturbed electrochemical system', *J. Chem. Phys.* 120, 8389 (2004)
52. M. Losada-Cassou, S.H. Dong, and Yu Jiang, 'Exact solution of the Schrodinger Equation with position-dependent mass in quantum dots', *Phys. Lett. A* 331, 45 (2004)
53. Yu Jiang, 'Comments on Synchronization of coupled neurons', *Phys. Rev. Lett.* 93, 229801 (2004)
54. S.H. Dong, M. Lozada-Cassou, Yu Jiang, and W.C. Qiang, 'Exact solutions of the Hydrogen-like Atoms Confined by a Potential Step', *Physica Scripta*. 71, 436 (2005)
55. Yu Jiang, 'Multiple Dynamical resonances in a discrete neuronal model', *Phys. Rev. E* 71, 057103 (2005)
56. Yu Jiang, 'Levinson theorem for Dirac particles in n dimensions', *Phys. Rev. A* 71, 022714 (2005)
57. Yu Jiang, 'Dirac equations in n+1 dimensions', *J. Phys. A* 38, 1157, (2005)
58. Yu Jiang, S.H. Dong, A. Antillon, and M. Lozada-Cassou, 'Low momentum scattering of the Dirac particle with an asymmetric cusp potential', *Eur. Phys. J. C* 45, 525 (2005)
59. Yu Jiang, Gabriel E. Aguilar Pineda, A. Antillon, Shi-Hai Dong, and M. Lozada-Cassou, 'The effects of unequal ionic sizes for an electrolyte in a charged slit', *J. Colloid and Interface Sci.*, 295, 124 (2006)
60. Shi-Hai Dong, M. Lozada-Cassou, Yu Jiang, F. Jiménez Angeles, and A.L. Rivera, "Hidden Symmetries and Thermodynamic properties for a harmonic oscillator plus an inverse square potential." *Inter. J. Quantum Chemistry*, 107 (2007) 366
61. G.E. Aguilar-Pineda, F. Jimenez Angeles, J. Yu and M. Lozada Cassou, "Van der Waals-like isotherms in a confined electrolyte by spherical and cylindrical nanopores", *J. Phys. Chem. B* 111, 2033 (2007)

