

Antonio M. García-García

List of publications

58. 'Can disorder really enhance superconductivity?'

J. Mayoh, A. M. García-García, [arXiv:1412.0029](https://arxiv.org/abs/1412.0029)

57. 'Far-from-equilibrium coarsening, defect formation, and holography'

P .M. Chesler, A. M. Garcia-Garcia, H. Liu, arXiv:1407.1862

56. 'Number theory, periodic orbits and superconductivity in nano-cubes'

J. Mayoh, A. M. García-García, Phys. Rev. B 90, 014509 (2014).

55. 'Destruction of Long-range Order by Quenching the Hopping Range in One dimension'

M. Tezuka, A. M. García-García, M. A. Cazalilla, Phys. Rev. A 90, 053618 (2014).

54. 'Interplay of classical and "quantum" capacitance in a one dimensional array of Josephson junctions'

P. Ribeiro, A. M. García-García, Phys. Rev. B 89, 064513 (2014).

53. 'Dissipation in a simple model of a topological Josephson junction'

P. Matthews, P. Ribeiro, A. M. García-García, Phys. Rev. Lett. 112, 247001 (2014).

52. 'Size effects in superconducting thin films coupled to a substrate'

A. Romero-Bermúdez, A. M. García-García, Phys. Rev. B, 89 024510 (2014).

51. 'Shape resonances and shell effects in thin film multi-band superconductors'

A. Romero-Bermúdez, A. M. García-García, Phys. Rev. B, 89 064508 (2014).

50. 'Normal modes and time evolution of a holographic superconductor after quench'

X. Gao, A. M. García-García, H. Bi Zeng, H.-Q. Zhang, [JHEP 1406 \(2014\) 019](https://doi.org/10.1007/JHEP1406(2014)019)

49. 'A thermal quench induces spatial inhomogeneities in a holographic superconductor'

A. M. García-García, H. B. Zeng, H. Q. Zhang, JHEP 1407 (2014) 096.

48. 'Enhancing bulk superconductivity by engineering granular materials'

J. Mayoh, A. M. García-García, Phys. Rev. B 90, 134513 (2014).

47. 'Inhomogenous pairing and enhancement of superconductivity in large Sn nanograins'

J. Mayoh, A. M. García-García, Proceedings "Quantum in Complex Matter:Superconductivity,

Magnetism and Ferroelectricity", Ischia, 2013, [arXiv:1309.6255](https://arxiv.org/abs/1309.6255)

46. 'Thermal amplitude fluctuations in arrays of small Josephson junctions'
A. M. García-García, *J. Supercond. Nov. Magn.* (2013), DOI: 10.1007/s10948-013-2162-z
45. 'Phase coherence in one-dimensional superconductivity by power-law hopping'
A. M. Lobos, M. Tezuka, A. M. García-García, *Phys. Rev. B* 88, 134506 (2013).
44. 'Holographic Description of Finite Size Effects in Strongly Coupled Superconductors'
A. M. García-García, J. E. Santos, B. Way, *Phys. Rev. B* 86, 064526 (2012).
43. 'Combined effect of thermal and quantum fluctuations in superconducting nanostructures: a path integral approach'
P. Ribeiro, A. M. García-García, *Phys. Rev. Lett.* 108, 097004 (2012).
42. 'Testing the universality of the many body metal-insulator transition by time evolution of a disordered one-dimensional ultracold fermionic gas'
M. Tezuka, A. M. García-García, *Phys. Rev. A* 85, 031602 (2012) (*Rapid Comm.*)
41. 'Quantum Quenches in Disordered Systems: Approach to Thermal Equilibrium without a Typical Relaxation Time'
E. Khatami, A. Relaño, M. Rigol, A. M. García-García, *Phys. Rev. E* 85, 050102 (2012) (*Rapid Comm.*)
40. 'Quantifying fluctuations from the tunnelling differential conductance'
A. M. García-García, Pedro Ribeiro, *J. Supercond. Nov. Magn.* (2012), DOI 10.1007/s10948-012-1662-6
39. 'Enhancement of the critical temperature in iron-pnictide superconductors by finite size effects'
A. M. García-García, M. A. N. Araujo, P. D. Sacramento, *Phys. Rev. B* 84, 172502 (2011).
38. 'Experimental observation of thermal fluctuations in single superconducting Pb nanoparticles through tunneling measurements'
I. Brihuega, A. M. García-García, P. Ribeiro, Miguel M. Ugeda, C. H. Michaelis, I. Brihuega and S. Bose, K. Kern, *Phys. Rev. B* 84, 104525 (2011) (*Editor Suggestions*)
37. 'BCS superconductivity in metallic nanograins: Finite-size corrections, low energy excitations, and robustness of shell effects'
A. M. García-García, J. D. Urbina, E. Yuzbashyan, K. Richter and B. Altshuler, *Phys. Rev. B* 83, 014510 (2011).
36. 'Observation of shell effects in superconducting nanoparticles of Sn'
S. Bose, A. M. Garcia-Garcia, Miguel M. Ugeda, J. D. Urbina, C. H. Michaelis, I. Brihuega and K. Kern, *Nature Materials* 9, 550 (2010).
35. 'Localization in fractal and multifractal media'
A. M. Garcia-Garcia, Emilio Cuevas, *Phys. Rev. B* 82, 033412 (2010).

34. '**Stability of the superfluid state in a disordered 1D ultracold fermionic gas'**
M. Tezuka, A. M. García-García, *Phys. Rev. A* 82, 043613 (2010).
33. '**A holographic approach to phase transitions'**
S. Franco, A. M. García-García, D. Rodriguez, *Phys. Rev. D* 81, 041901 (2010) (*Rapid Comm.*)
32. '**A general class of holographic superconductors'**
S. Franco, A.M. García-García, D. Rodriguez, *JHEP* 4 (2010) 092, *arXiv:0906.1214*.
31. '**Absence of localization in one-dimensional disordered systems'**
A. M. García-García, E. Cuevas, *Phys. Rev. B (Brief Reports)* 79, 073104 (2009).
30. '**The Anderson transition in a 3d kicked rotor'**
J. Wang and A. M. García-García, *Phys. Rev. E* 79, 036206 (2009).
29. '**BCS theory for finite size superconductors'**
A. M. García-García, J. D. Urbina, E. Yuzbashyan, K. Richter and B. Altshuler, *Phys. Rev. Lett.*, 100, 187001 (2008).
28. '**Finite size corrections to the blackbody radiation laws'**
A. M. García-García, *Phys. Rev. A*, 78, 023806 (2008).
27. '**A semiclassical theory of the Anderson transition'**
A. M. García-García, *Phys. Rev. Lett.*, 100, 076404 (2008).
26. '**Universality in quantum chaos and the one parameter scaling theory'**
A. M. García-García, J. Wang, *Phys. Rev. Lett.*, 100, 070603 (2008).
25. '**Classical and quantum anomalous diffusion in a system of 2δ Kicked Quantum Rotors'**
A. M. García-García, J. Wang, *Int. J. Mod. Phys. B*, 22, 5261 (2008).
24. '**Dimensional dependence of the metal-insulator transition'**
A. M. García-García, E. Cuevas, *Phys. Rev. B* 75, 174203 (2007).
23. '**Anderson localization in quantum chaos: scaling and universality'**
A.M. García-García, J. Wang, *Acta Phys. Pol.*, 112, 635, (2007). Proceedings 3rd Workshop on Quantum Chaos and Anderson localization 2007,
22. '**Chiral phase transition in QCD as a metal insulator transition'**
A. M. García-García, J. Osborn, *Phys. Rev. D* 75, 034503 (2007).
21. '**Is the chiral phase transition induced by a metal insulator transition?**'
A. M. García-García, J. Osborn, Proceedings, Infrared QCD, Rio, (2006), *Braz. J. of Phys.*, 37, 246 (2007).
20. '**Role of Anderson localization in the QCD chiral phase transition',**
A. M. García-García, Proceedings International Conference of *Nuclear Physics 2007*, Tokyo.
19. '**Is it possible to observe experimentally a metal-insulator transition in ultra cold**

atoms?

A. M. García-García, J. Wang, *Phys. Rev. A* 74, 063629 (2006).

18. 'Anderson transition in systems with chiral symmetry'

A. M. García-García, E. Cuevas, *Phys. Rev. B* 74, 113101 (2006).

17. 'A semiclassical description of the autocorrelations in Nuclear Masses'

A. M. García-García, J. G. Hirsch, A. Frank, *Phys. Rev. C* 74 (2006) 024324.

16. 'Chiral phase transition and Anderson localization in the Instanton Liquid Model for QCD'

A. M. García-García, J.C. Osborn, *Nucl. Phys. A* 769, 251 (2006).

15. 'Power spectrum characterization of the Anderson transition'

A. M. García-García, *Phys. Rev. E* 73, 026213 (2006).

14. 'Semi-Poisson statistics in quantum chaos'

A. M. García-García, J. Wang, *Phys. Rev. E* 73, 036211(2006).

13. 'Localization in the Instanton Liquid model of QCD'

A. M. García-García, 'International Colloquium on Group Theoretical Methods in Physics', New York, June 2006.

12. 'Classical singularities and Semi-Poisson statistics in disordered systems'

A. M. García-García, *Phys. Rev. E* 72, 066210 (2005).

11. 'The Anderson transition in quantum chaos'

A. M. García-García, J. Wang, *Phys. Rev. Lett.* 94, 244102(2005).

10. 'Chiral phase transition as an Anderson transition in the Instanton liquid model of QCD'

A. M. García-García, James C. Osborn, *PoS LAT2005* (2005) 265.

9. 'Long range disorder and Anderson transition in systems with chiral symmetry'

A. M. García-García, K. Takahashi, *Nucl. Phys. B*, 700 (2004) 361.

8. 'The QCD vacuum as a disordered medium: A simplified model of the QCD Dirac operator'

A. M. García-García, J. Osborn, *Phys. Rev. Lett.* 93 (2004) 132002.

7. 'Classical intermittency and quantum Anderson transition'

A. M. García-García, *Phys. Rev. E* 69 (2004) 066216.

6. 'Effect of a magnetic flux on the critical behavior of a system with long range hopping'

A. M. García-García, *Phys. Rev. B* 69 (2004) 245121.

5. 'Critical statistics in quantum chaos and Calogero Sutherland model at finite temperature'

A. M. García-García, J.J.M. Verbaarschot, *Phys.Rev. E* 67, 046104(2003).

4. 'Chiral phase transition and Anderson localization in the Instanton liquid model of

QCD'

A. M. García-García, *Proceedings 'Quantum mechanics and chaos', Kyoto, 2003.*

3. 'Critical statistics for non hermitian matrices'

A. M. García-García , J.J.M. Verbaarschot, S. Nishigaki, *Phys. Rev. E* 66 016132 (2002).

2. 'Spectral properties of a generalized chGUE'

A. M. García-García, *Phys. Rev. E* 64 066121 (2001).

1. 'Critical statistics for chiral ensembles'

A. M García-García, J.J.M.Verbaarschot, *Nucl. Phys. B* 586 (2001) 668.