

Curriculum Vitae



PERSONAL INFORMATION

Name: Antonio Miguel García-García

Researcher ID: <http://scholar.google.co.uk/citations?user=9IRAYdEAAAAJ&hl=en>

Web site: <http://www.physics.sjtu.edu.cn/amgg>

■ PUBLICATION RECORD

h-index: 30 Citations: 2580

84 publications (81 refereed, 3 preprints) including: 1 Nature Materials, 1 Phys. Rev. X, 7 Phys. Rev. Lett., 5 Phys. Rev. Rapid, 2 Phys. Rev. B (Editor's Choice), 4 Phys. Rev. A, 21 Phys. Rev. B, 1 Phys. Rev. C, 8 Phys. Rev. D, 14 Phys. Rev. E, 2 Nucl. Phys. B, 1 Nucl. Phys. A, 7 JHEP.

■ EDUCATION

1998/09/01-2002/08/20 Ph.D in Theoretical Physics. SUNY at Stony Brook, Adviser: J. Verbaarschot.
1997/09/01-1998/07/03 Student exchange. University of California at Santa Cruz.
1991/09/02-1996/07/05 Bachelor in Physics. Universidad Autonoma de Madrid, Spain.

■ CURRENT ACADEMIC POSITION

2017- Tenured Professor, School of Physics, Shanghai Jiao Tong University.

■ CURRENT GROUP MEMBERS

2018-2020 Postdocs: Salomon Zacarias, Vaios Zoigos, Shuang Wu.
2018-2022 PhD students: Jie Ping, Bo Fan.

■ PREVIOUS ACADEMIC POSITIONS

2011-2017 EPSRC Career Acceleration Fellow and Assistant Professor in the Theory of Condensed Matter Group, Cavendish Laboratory, Cambridge University.
2011-2015 Invited Associate Professor. Instituto Superior Tecnico, University of Lisbon.
2010-2011 Assistant Professor. Instituto Superior Tecnico, University of Lisbon.
2009 JSPS Fellow Tokyo University (two months).
2004-2009 Marie Curie Fellow and Lecturer at Princeton University.
2002-2004 Postdoc at Universite Paris Sud.
2002 Postdoc National University of Singapore (two months).
2000-2002 Research Assistant. Nuclear Theory Group at Stony Brook University.

■ FELLOWSHIPS, GRANTS AND AWARDS

2019-2022 Chinese National Science Foundation (660.000 RMB/80000€)
2017-2020 1000 Talent Shanghai Municipality (750.000 RMB/100000€)
2017 ICAM Sponsored QuantEmX Scientist Exchange Award (4300€)
2011-2017 EPSRC Career Acceleration Fellowship (125000€/year)
2011-2014 Grant Fundação para a Ciência ea Tecnologia de Portugal (30000€/year)
2010-2014 International Reintegration Grant funded by the European Commission (25000€/year)
2009 Short term fellowship granted by the Japanese Society for the Promotion of Science.
2005-2009 Outgoing Marie-Curie fellowship granted by the European Commission (full financial support).
2004-2005 MECD-Fulbright fellowship granted by the Spanish Government.
2001 Peter B. Kahn fellowship for outstanding graduate students.
1998-2000 "laCaixa fellowship" which covered both personal expenses and tuition for two years.

■ PREVIOUS SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

2012 – 2014 Pedro Ribeiro, Hua Bi, Hai-Qing Zhang, Postdocs, Lisboa University.
2012 – 2016 Aurelio Bermudez, PhD student, Cambridge University.

2014 – 2017 Bruno Loureiro, PhD student, Cambridge University.

2011 – 2015 James Mayoh, PhD student, Cambridge University.

▪ TEACHING ACTIVITIES

2019-2020 Complex Analysis and Probability, SJTU (3 hours/week, 4 credits)

2019-2020 Advanced Quantum Mechanics (3 hours/week, 2 credits)

2019 Advanced Condensed Matter Physics, SJTU (3 hours/week, 1.333 credits)

2018 Complex Analysis and Probability, SJTU (3 hours/week, 4 credits)

2012-2017 Supervision of Part III master students in Cambridge University.

2012 Graduate Lectures on Mesoscopic Physics, Cambridge University.

2006-2009 Lecturer (5 hours/week), Princeton University, Classical Mechanics and Electromagnetism.

▪ ORGANISATION OF SCIENTIFIC MEETINGS

2015 Workshop *Superconductivity on the verge*, Lorentz Center, Leiden. Co-organizer. July 2015.

2013 Programme *Mathematics and physics of the holographic principle*, Isaac Newton Institute, Cambridge, UK. <http://www.newton.ac.uk/programmes/HOL/>.

2012 Workshop *Control and enhancement of superconductivity in nano structures*, CECAM, Lausanne. <http://www.cecarn.org/workshop-680.html>.

2012 Workshop *Correlations and coherence in quantum systems*, Evora, Portugal. <http://hawk.fisica.uminho.pt/ccqs/>.

▪ INSTITUTIONAL RESPONSIBILITIES

2012 Panel Member for recruitment of PhD students, Cavendish Laboratory, Cambridge.

2007 Committee member to redesign the curriculum of Physics courses in Princeton University.

▪ COMMISSIONS OF TRUST

2015 – Reviewer for Agencia Nacional de Promoción Científica y Técnica (ANPCYT), Argentina.

2013 – Reviewer for the Engineering and Physical Sciences Research Council (EPSRC), UK.

2013 – Reviewer for the Deutsche Forschungsgemeinschaft (DFG), Germany.

2012 – Reviewer for the Foundation for Fundamental Research on Matter (FOM), Netherlands.

2020 -- Reviewer National Research Foundation of Israel.

2012 – Guest editor of a focus issue on superconductivity in nanoscale systems in the journal *Superconductor Science and Technology*.

▪ JOURNAL REFEREEING

Nature Physics, Nature Communications, Phys. Rev. A, B, E, X, Phys. Rev. Lett., J. Phys. A, Nuclear Physics B, New Journal of Physics, Journal of High Energy Physics.

▪ INVITED SPEAKER IN CONFERENCES/WORKSHOPS

2003 *Quantum mechanics and chaos*, Yukawa Institute, Kyoto, Japan.

2004 *Gathering on Random Matrix Theory*, Cuernavaca, Mexico.

2004 *Dynamics Days*, Singapore.

2005 *Aspects of Quantum Chaotic Scattering*, Dresden.

2005 *Lattice 2005*, Dublin.

2006 *Exploration of Hadron Structure and Spectroscopy using Lattice QCD*, INT, Seattle.

2006 *International Colloquium on Group Theoretical Methods in Physics*, New York.

2006 *Infrared QCD*, Rio, Brazil.

2007 *Confinement: light-and heavy-quark domains*, Trento.

2007 *Workshop on Quantum Chaos and Anderson localization*, Warsaw.

2007 *International conference on Nuclear Physics*, Tokyo.

2007 *Deconfinement, extreme environments and holography*, Cambridge.

2007 *Mathematical Physics Days at Weizmann Institute*, Israel.

2008 *Dynamical Days*, Nara, Japan.
 2008 *Anderson Localization and related phenomena*, Cambridge.
 2008 *Classical and quantum transport in the presence of disorder*, Cambridge.
 2008 *Mesoscopic Systems Symposium*, Wesleyan University, USA.
 2009 *Symposium in honor of H. A. Weidenmueller*, Cuernavaca, Mexico.
 2009 *New directions in superconducting nanostructures*, Nagoya, Japon.
 2010 *IPMU Focus week Condensed Matter Meets High Energy Physics*, Tokyo, Japan.
 2010 *Superconductivity in nanosized systems*, CECAM, Lausanne.
 2010 *Encontro Nacional de Fisica da Materia Condensada*, Lisbon.
 2010 *Workshop on Correlations and Coherence in Quantum Matter*, Evora.
 2010 *AdS₄/CFT₃ and the holographic states of matter*, Firenze.
 2011 *AdS/CFT and Condensed Matter*, Imperial College, London.
 2011 *Super-Stripes 2011*, Rome.
 2012 *International Conference on Superconductivity and Magnetism*, Istanbul.
 2012 *Super-Stripes 2012*, Erice.
 2013 *Quantum complex matter*, Ischia.
 2013 *The New Generation in Strongly Correlated Electron Systems*, Sestri, Italy.
 2014 *Multiband Superconductivity*, Camerino, Italy.
 2014 *Super-Stripes 2014*, Erice, Italy.
 2014 *Quantum Field theory, String Theory and Condensed Matter Physics*, Crete, Greece.
 2015 *Holographic Methods for Strongly Coupled Systems*, Galileo Institute, Florence.
 2015 *Super-Stripes 2015*, Ischia, Italy.
 2015 *Applications of Holography to Condensed Matter Physics*, Porto, Portugal.
 2016 *International School 'Symmetry and Structural Properties of Condensed Matter'*, Rzeszow, Poland.
 2016 *Super-Stripes 2016*, Ischia, Italy.
 2016 *Novel quantum phenomena in ultra-thin superconductors*, Camerino, Italy.
 2016 *Theoretical Condensed Matter Physics Symposium*, University of Melbourne.
 2017 *Disorder in Condensed Matter and Black Holes*, Lorentz Center, Leiden, Netherlands.
 2017 *Super-Stripes 2017*, Ischia, Italy.
 2017 *RMT, Time Series and Many-Body Systems*, Cuernavaca, Mexico.
 2017 *International Workshop: Topological matter meets quantum information*, Shanghai.
 2017 *Random Matrices EurAsia 2017*, Fudan University, Shanghai.
 2018 *Workshop Black hole, Quantum chaos and Solvable quantum systems*, Tsinghua Sanya International Mathematics Forum (TSIMF).
 2018 *SuperTop 2018: International Workshop on 2D superconductivity*, Rome, Italy.
 2018 *Focus Program: Holography and Geometry of Quantum Entanglement*, APCTP, Pohang, Korea.
 2018 *Workshop Random Matrices, Integrability and Complex Systems*, Judean Hills, Israel.
 2018 *Symposium: Leggett@Shanghai*, Shanghai, China.
 2018 *4th Conference on Condensed Matter Physics (CCMP-2018)*, Shanghai, China.
 2019 *Workshop Black Holes and Holography*, Tsinghua Sanya International Mathematics Forum (TSIMF).
 2019 *Workshop, RMT in High Energy Physics and Beyond*, ECT, Trento, Italy.
 2019 *SuperTop2019: International Workshop on 2D superconductivity*, Rome, Italy.
 2019 *8th International Congress of Chinese Mathematicians*, Beijing.
 2019 *Universality and ergodicity in quantum many-body systems*, Simons Center for Geometry and Physics, Stony Brook, New York.

▪ **PhD EXAMINER**

Cambridge University, Universidad del Pais Vasco, Leiden University, Loughborough University, Roma la'Sapienza

▪ PAST GROUP MEMBERS

2011-2014	James Mayoh, PhD Student, After: Postdoc at Southampton University
2012-2014	Hai-Qing Zhang, Postdoc, After: Postdoc at Utrecht University.
2013-2014	Pedro Ribeiro, Postdoc, After: Ciencia 2013 Fellow (5 years) at Lisboa University.
2012-2013	Hua Bi Zeng, Postdoc, After: Prof. Bohai University, China.
2012-2016	Aurelio Bermudez, PhD Student, After: Postdoc Leiden University, Netherlands.
2014	Paul Matthews, Master Student, After: PhD student at Imperial College, London.
2015	Chris Parmee, Master Thesis Student, After: PhD. Student in the Cavendish laboratory.
2015	Jiasheng Chen, Master Thesis Student, After: PhD. Student in the Cavendish laboratory.
2016	Corentin Bernard, Master Thesis Student, After: PhD. Student Grenoble University, France.
2017	Bruno Murta, Master Thesis Student, After: PhD Student, Imperial College, UK.
2014-2018	Bruno Loureiro, PhD Student, After: Postdoc, Institut de Physique Theorique, CEA, Saclay, Paris.

▪ SHORT VISITS AND SEMINARS

- Brunel University, 12/2001, Prof. Yan Fyodorov.
- Oxford University 12/2001, Prof. J. Chalker.
- Birmingham University 12/2001, Prof. Igor Lerner.
- Universite Paris Sud, 12/2001, LPTMS, Prof. P. Leboeuf.
- Yale University 2/2002, Prof. Y. Alhassid.
- Baptist University Hong Kong 08/2002, Prof. B. Hu.
- Melbourne University 06/2002, Prof. P. Forrester.
- National University of Singapore 06/2002, 07/2004, Prof. B. Li
- University of Nottingham 06/2003, Prof. P. Fromhold.
- Tokyo University 11/2003, Prof. S. Hikami.
- Ryokoku University, 11/2003, Kyoto, Prof. S. Iida
- Metropolitan University Tokyo 11/2003. Prof. A. Shudo.
- Leiden University, 1/2004, Prof. C. Beenakker.
- Amsterdam University, 1/2004, Prof. K. Schoutens.
- Lund University 02/2004, Prof. T. Guhr.
- Instituto de Estructura de la Materia, 06/2005, Prof J. Dukelsky.
- Universidad de Murcia, 06/2005, Prof. Miguel Ortuño.
- University of Kentucky, 10/2005, Prof. G. Murthy.
- Cambridge University, 05/2006, Prof. Elliot.
- Oxford University, 05/2006, Prof. Teper.
- Stony Brook, 04/2007, Prof. Shuryak.
- New York University, 04/2007, Prof. Zaslavsky.
- Universidad Autonoma Madrid, 05/07, Prof. Gonzalez-Arroyo.
- Oslo University, 05/2007, Dr. Bergli.
- Oxford University, 05/2007, Prof. Teper.
- National University of Singapore, 06/2007, Prof. Gong
- Auckland University, 06/2007, Prof. Leonhardt.
- Niels Bohr Institute, 03/2008, Prof. Daamgard.
- Wesleyan University, 03/2008, Prof. Kottos.
- Antwerp University, 08/2008, Prof. Peeters.
- RIKEN, Tokyo, Japan, 12/2008, Prof. Furusaki.
- Max Planck, Dresden, Germany, 3/2009, Prof. Moessner.
- Instituto de Estructura de la Materia, 03/2010, Prof J. Dukelsky.

- Seoul National University, Corea, 6/2010, Prof. Insuk Yu.
- Institute for Advanced Studies, Tsinghua University, Beijing, 06/2010, Prof. Nieh.
- Institute of Physics, Academia Sinica, Taipei, Taiwan, 06/2010, Prof. Sungkit.
- Kyoto University, 06/2010, Prof. Tezuka.
- Georgetown University, 01/2011, Prof. Rigol.
- Cambridge University, 05/2011, Prof. Cooper.
- Birmingham University, 10/2012, Prof. Gangardt.
- Instituto Estructura de la Materia, CSIC, Madrid, 12/2012
- Tsinghua University, 01/2013, Prof. Xue.
- Riken, Saitama, Japan, 01/2013, Prof. Naidon.
- Kyoto University, Japan, 01/2013, Prof. Tezuka.
- Oxford University, 2/2013, Colloquium Theoretical Physics Department.
- Loughborough University, 3/2013, Prof. Betouras.
- Leiden University, 3/2013, Prof. J. Zaanen.
- Alvar Aalto University, Helsinki, 7/2013, Prof. J. Pekkola
- Riken, Saitama, Japan, 07/2013, Prof. Naidon.
- Crete University, Greece, 02/2014, Colloquium, Prof. E. Kiritsis.
- Rutgers University, USA, 03/2014, Prof. E. Yuzbashyan.
- Max Planck Institute, Stuttgart, 03/2014, Prof. K. Kern.
- Riken, Saitama, Japan, 01/2015, Prof. Naidon.
- Bristol University, UK, 03/2015, Prof. Annett.
- Instituto Estructura de la Materia, Madrid, 4/2015, Prof. Dukelsky.
- Lancaster University, 10/2015, Prof. Shomerus.
- La Sapienza University, Rome, 11/2015 Prof. Benfatto.
- RIKEN, Tokyo, 01/2016 Prof. Pascal Naidon.
- University of Tokyo, 01/2016, Prof. Hasegawa.
- Oxford, 03/2016 Prof. Andrei Starinets.
- Utrecht University, 03/2016 Dr. Hai-Qing Zhang.
- Warwick University, 03/2016 Prof. Quigley.
- Leeds University, 02/2017 Prof. Papic.
- University of Crete, 04/2017 Prof. Kiritsis.
- ESPCI, University of Paris, 03/2017 Prof. Lesueur
- Korea Institute for Advanced Studies, 11/2017 Dr. Rosa
- Beihang University, 04/2018 Prof. Hai-Qing Zhang
- Institute for Advanced Studies, Tsinghua University, 04/2018, Prof. Zhai.
- Donostia International Physics Center, 08/2018, Prof. M. Ugeda.
- la'Sapienza Universidad, 07/2018, Prof. Lara Benfatto.
- la'Sapienza Universidad, 07/2019, Prof. Lara Benfatto.