

Part A. PERSONAL INFORMATION

CV date	26/02/2019
---------	------------

First and Family name	Alfredo Levy Yeyati		
Passport, ID number	11.847.346T	Age	58
Researcher numbers	Researcher ID	K-6697-2014	
	Orcid code	0000-0001-5668-6636	

A.1. Current position

Name of Institution	Universidad Autónoma de Madrid		
Department	Física Teórica de la Materia Condensada		
Address and Country	Campus de Cantoblanco		
Phone number	91 497 6146	E-mail	a.l.yeyati@uam.es
Current position	Full Professor	From	13/04/2012
Espec. cód. UNESCO	2211		
Palabras clave	Condensed Matter Physics, Quantum Transport		

A.2. Education

PhD	University	Year
Doctor en Ciencias Físicas	Universidad de Buenos Aires	1989

A.3. JCR articles, h Index, thesis supervised...

More than 120 JCR articles, more than 6300 citations, average citation per article 50, h index=40 (WOS, Scopus)

Has supervised 6 PhD thesis and oriented 7 postdoctoral researchers

Part B. CV SUMMARY (max. 3500 characters, including spaces)

His main research interest is on the theory of quantum transport in meso and nano scale systems, with special focus on effects due to superconductivity and electronic correlations. He has published more than 120 papers in high impact international Journals including Nature, Physical Review Letters, Physics Reports, Advances in Physics and Nature Physics. His works have received more than 6200 citations with an h index of 39. He has been the thesis advisor of 6 PhD students, many master students and has oriented several postdoctoral researchers. He has been invited to present his works in many important conferences and to give courses in several international schools, including the prestigious L'Ecole de Physique des Houches. He has been the PI in many national and European projects and participated in the organization of international conferences and schools, the most recent one being the XXIV International Summer School 'Nicolás Cabrera' on Quantum Transport in Topological Materials in 2017. He keeps a strong collaboration with highly recognized experimental groups such as the Quantronique group at the CEA-Saclay, the Nanoelectronics group of the Basel University and the Atomic and Molecular Conductors group in Leiden. He also collaborates regularly with theoretical groups at the Universities of Dusseldorf, Bordeaux and Braunschweig, among others. He is a regular referee for several journals including Physical Review Letters and Nature, and is regularly consulted for the evaluation of projects by agencies like ERC, DOE (USA), ANEP (Spain), ANR (France), FOM (Netherlands) or FONCYT (Argentina). In 2016 he was recognized as "Outstanding Referee by the American Physical Society". Among the distinctions in his career one can point out a Marie Curie fellowship which allowed him to do a research stay at the University of Geneve and initiate collaboration with Prof. Markus Buttiker, one of the most recognized person in the field of quantum transport. At present he is the head of the Theoretical Condensed Matter Physics department and vice director of Nicolás Cabrera Institute of Material Science, both at the Autónoma University of Madrid.

Part C. RELEVANT MERITS

C.1. Publications (including books)

Selected publications in reverse chronological order

Spin-orbit splitting of Andreev states revealed by microwave spectroscopy

L. Tosi, C. Metzger, M. F. Goffman, C. Urbina, H. Pothier, S. Park, A. Levy Yeyati, J. Nygard and P. Krogstrup, Phys. Rev. X **9**, 011010 (2019), selected for Highlights in Physics.

Interaction-induced zero-energy pinning and quantum dot formation in Majorana nanowires

S. D. Escribano, A. Levy Yeyati and E Prada, Beilstein J. Nanotechnol. **9**, 2171 (2018). Citations: 5

Zero-energy pinning from interactions in Majorana nanowires

F. Domínguez, J. Cayao, P. San-José, R. Aguado, A. Levy Yeyati and E. Prada, npj Quantum Materials **2**, 13 (2017). Citation: 18

Andreev Bound States Formation and Quasiparticle Trapping in Quench Dynamics Revealed by Time-Dependent Counting Statistics

R. Seoane Souto, A. Martín-Rodero, and A. Levy Yeyati, Phys. Rev. Lett. **117**, 267701 (2016). Citations: 9

Low-energy theory of transport in Majorana wire junctions

A. Zazunov, R. Egger y A. Levy Yeyati
Physical Review B, **94**, 014502 (2016). Citas: 27

Magnetic Field Tuning and Quantum Interference in a Cooper Pair Splitter

G. Fülöp, F. Domínguez, S. d'Hollosy, A. Baumgartner, P. Makk, M. H. Madsen, V. A. Guzenko, J. Nygård, C. Schönenberger, A. Levy Yeyati, and S. Csonka, Phys. Rev. Lett. **115**, 227003 (2015). Citas: 23

Transient dynamics and waiting time distribution of molecular junctions in the polaronic regime

R. Seoane Souto, R. Avriller, R. C. Monreal, A. Martín-Rodero, and A. Levy Yeyati, Phys. Rev. B **92**, 125435 (2015). Citations: 31

Entanglement Detection from Conductance Measurements in Carbon Nanotube Cooper Pair Splitters

B. Braunecker; P. Burset y A. Levy Yeyati.
Physical Review Letters, **111**, 136806 (2013). Citations: 40

Majorana Single-Charge Transistor

R. Hütten; A. Zazunov; B. Braunecker; A. Levy Yeyati y R. Egger
Physical Review Letters, **109**, 166403 (2012). Citations: 55

Josephson and Andreev transport in Quantum Dots

A. Martín-Rodero y A. Levy Yeyati
Advances in Physics, **60**, 899-958 (2011). Citations: 112

Carbon Nanotubes as Cooper-Pair Beam Splitters

L.G. Herrmann; F. Portier; P. Roche; A. Levy Yeyati; T. Kontos y Ch. Strunk
Physical Review Letters, **104**, 026801 (2010). Citations: 217

Quantum properties of atomic-sized conductors

N. Agraït, A. Levy Yeyati y J.M. van Ruitenbeek
Physics Reports **377**, 81, (2003). Citations: 1141

C.2. Research projects and grants

Reference: EU FET-OPEN Proposal 828948

Title: Andreev Qubits for Scalable Quantum Computation (AndQC)

Principal Investigator (UAM node): Alfredo Levy Yeyati

Funding Agency: European Commission

Starting-Final dates: 01/04/2019-30/03/2023

Budget (Euro): 336.250

Reference: FIS2017-84860-R

Title: Dynamics, Superconductivity and Topology in Hybrid Nanostructures (DynStop)

Principal Investigators: Alfredo Levy Yeyati and Eduardo Lee

Funding Agency: Ministerio de Economía y Competitividad

Starting-Final dates: 01/01/2018-31/12/2020

Budget (Euro): 157.300

Reference: FIS2014-55486-P

Title: Interactions, Topology and non-stationary effects in Quantum Transport (Instant-QT)

Principal Investigator: Alfredo Levy Yeyati

Funding Agency: Ministerio de Economía y Competitividad

Starting-Final dates: 01/01/2015-31/12/2017

Budget (Euro): 40.000

Reference: FIS2011-26516

Title: Electrones correlacionados en nanoestructuras híbridas: de las propiedades de transporte al procesamiento de la información cuántica

Principal Investigator: Alfredo Levy Yeyati

Funding Agency: Ministerio de Economía y Competitividad

Starting-Final dates: 01/01/2012-31/12/2014

Budget (Euro): 56.870

Reference: FP7-ICT-2009-C271554

Title: Source of Electron Entanglement in Nano Devices

Principal Investigator (UAM node): Alfredo Levy Yeyati

Funding Agency: European Commission

Starting-Final dates: 01/08/2011-31/12/2014

Budget (Euro): 266.880

Reference: FIS2008-04209

Title: Transporte cuántico en nano-estructuras híbridas: efectos asociados con superconductividad, magnetismo e interacciones

Principal Investigator: Alfredo Levy Yeyati

Funding Agency: Ministerio de Ciencia e Innovación

Starting-Final dates: 01/01/2008-31/12/2011

Budget (Euro): 119.790

Reference: NAN2007-29366-E

Title: Characterization of Electronic Nanodevices through Noise Properties

Principal Investigator: Alfredo Levy Yeyati

Funding Agency: Ministerio de Ciencia e Innovación

Starting-Final dates: 01/01/2008-31/12/2010

Budget (Euro): 118.000

C.4. Invited Talks at International Conferences (last 5 years)

Title: Revealing the Fine Structure of Andreev Levels in Hybrid Nanowires

Conference: Station Q December Meeting

Place: Santa Bárbara (USA), Year: 2018

Title: Quantum Transport and Interactions in Majorana Nanowires
Conference: ICAS Workshop on Topological Quantum Matter
Place: Buenos Aires (Argentina), Year: 2017

Title: Interactions and Transport in Majorana Nanowires
Conference: Spin Dynamics in the Dirac Systems
Place: Mainz (Alemania), Year: 2017

Title: Interactions and Transport in Majorana Nanowires
Conference: Majorana States in Condensed Matter. Towards Topological Quantum Computing
Place: Mallorca (España), Year: 2017

Title: Interactions and Transport in Majorana Nanowires
Conference: Nano Confined Superconductors and their Applications
Place: Garmish-Partenkirchen (Alemania), Year: 2016

Title: Interaction effects in mesoscopic transport: from atomic contacts to Majorana wires
Conference: Anniversary Workshop on Transport in Nanostructures 10th Capri Spring School 2014
Place: Capri (Italia), Year: 2014

Title: Majorana Single Charge Transistors
Conference: New Trends in Topological Insulators
Place: San Feliu de Guixols, Year: 2013

C.4 Courses in International Schools (last 5 years)

Title: Hamiltonian approach to transport in conventional and topological superconducting nanojunctions
School: 14th Capri School on Transport in Nanostructures
Place: Capri (Italy), Year: 2018

Title: The Hamiltonian approach to quantum transport in nanostructures
School: Frontiers in Condensed Matter
Place: San Sebastián, Year: 2014

C.5 Organization of I+D events (last 5 years)

XXIV International Summer School 'Nicolás Cabrera': Quantum Transport in Topological Materials
Participation: Member of Organizing Committee
Type of Activity: International School
Place: Miraflores de la Sierra, Spain
Date: September 4-8 2017

33rd International Conference on the Physics of Semiconductors
Participation: Scientific Committee
Type of Activity: International Conference
Place: Beijing, China
Date: July 31st August 5th 2016

Frontiers in Quantum Engineered Devices
Participation: Organizing Committee
Type of Activity: International Conference
Place: Obergurgl, Austria
Date: August 19 -24 2013