

Curriculum Vitæ of Dario Bercioux

Group website: www.dario-bercioux.eu

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Research-Id: [A-1767-2009](https://orcid.org/A-1767-2009)

Ikerbasque webpage: www.ikerbasque.net/dario-bercioux

Languages: Italian native, English fluent, German fluent, Spanish fluent, Basque basic.

MAIN SCIENTIFIC INTERESTS

Graphene and carbon Nanotubes, Topological Matter, Spintronics, Light-Matter Interaction, Pseudo-Spin-One Systems, Mesoscopic systems, Electronic and Photonic quantum simulators

SHORT RÉSUMÉ

- **Ikerbasque Research Associate** (Tenured Position) and group leader at the [MEPS group](#)
- Member of the International Advisory Board of [Phenikaa Institute for Advanced Studies](#) (Hanoi – Vietnam)
- Member of the Editorial Board of *Communication Physics*
- 66 Publications in international journals and refereed volumes, including
 - 17 Letters (including PRL, APL, EPL, PRB-R, PRR-R, Nat. Mater., Commun. Phys.)
 - 2 Invited Review Articles: Report on Progress in Physics & Annalen der Physik
 - 2 Invited News & Views in Nature Physics
 - Editor of a lecture notes book for Springer
 - Guest editor for a special issue of “[New Journal of Physics](#)” and “[Journal of Physics: Condensed Matter](#).”
 - 2012 citations in total, average citations per article 31.43¹, *h*-index of 22¹
- Tutor or co-tutor for 7 Ph.D. Thesis and 11 undergraduate thesis
- Grants from DFG, IGA (Germany), CRC (China), MINECO, Basque Government, and MICINN (Spain) for a total amount of > **900.000 Euro** since 2010
- Main- or co-organizer of 6 international workshops & 18 international schools of physics
- 70 invited talks: 29 at conferences, 41 at universities and other scientific institutions, two lecture sets in international schools of physics
- Referee for numerous international journals, including Science, Nature, Nature Physics, and Physical Review Letters

¹Source: Web of Science (October 2024)

RESEARCH POSITIONS

Since 10.2019	Ikerbasque Research Associate at the Donostia International Physics Center (Spain) – <i>Tenured Position</i> & group leader at the Mesoscopic Electrons and Photons System (MEPS) group
09.2019 10.2014	Ikerbasque Research Fellow at the Donostia International Physics Center (Spain) in the group of Dr. Sebastian Bergeret – <i>Tenure Track Position</i>
06.2014 07.2013	Postdoctoral Research Position at the Dahlem Center for Complex Quantum Systems (Germany) in the group of Prof. Dr. Piet Brouwer
07.2013 09.2010	Senior Postdoctoral Research Position at the Freiburg Institute for Advanced Studies, School of Soft Matter Research (Germany) in the group of Prof. Dr. Hermann Grabert
08.2010 09.2008	Postdoctoral Research Position at the Freiburg Institute for Advanced Studies, School of Soft Matter Research (Germany) in the group of Prof. Dr. Michael Thorwart
08.2008 01.2007	Postdoctoral Research Position at the Physikalisches Institut of the University of Freiburg (Germany) in the group of Prof. Dr. Hermann Grabert
12.2006 11.2004	Postdoctoral Research Position at the Institut für Theoretische Physik of the University of Regensburg (Germany) in the group of Prof. Dr. Klaus Richter

EDUCATION

04.2017	Abilitazione Scientifica Nazionale (ASN) as associate professor Italian Ministry of Education
05.2012	Privatdozent (equiv. associate professor) Physics Institute of the University of Freiburg
01.2005	Dottorato (equiv. Ph.D.) in Physics at the “Federico II” University of Naples (Italy). Supervisors: Profs. V. Cataudella and V. M. Ramaglia Title of the thesis: “Spin dependent transport in nanostructures”
10.2001	Laurea (equiv. M.Sc. resp. <i>Scientiæ Magister</i>) in Physics at the “Federico II” University of Naples (Italy) with degrees <u>110/110 Summa cum Laude</u> . Supervisor: Prof. Vittorio Cataudella Title of the thesis: “Studio della formazione di bipolaroni su un reticolo bidimensionale” [Study of the formation of bipolarons in a two-dimensional lattice]
07.1996	Maturità Tecnica (equiv. High Schol Certificate) at the ITIS “A.Righi” in Naples with final mark <u>60/60</u>

FURTHER RESEARCH ACTIVITIES

Since 09.2019	Member of the Editorial Board of <i>Communication Physics</i> (Springer-Nature)
10.2016	Guest member of the Centre de Physique Théorique of the Université d’Aix-Marseille in the group of Thierry Martin
Since 04.2016	Member of the Theoretical Chemistry and Physics at the Quantum Scale “ QuantumChemPhys ”, a Transborder Joint Laboratory (LTC - Laboratoire Transfrontalier Conjoint) between DIPC and University of Bordeaux
10.2012	Guest member of the “Geballe Laboratory for Advanced Materials - Stanford University” in the group of Prof. Hari Manoharan
2007 - 2008	Frequent guest in the “Quantum Transport and Information” Group by Prof. Rosario Fazio, Scuola Normale Superiore, Pisa (Italy)

03.2004 Guest member in the “Quantum Transport and Information” Group by Prof. Rosario Fazio,
10.2003 Scuola Normale Superiore, Pisa (Italy)

FUNDED GRANTS (> 900.000 EURO SINCE 2010)

- 2023-2026** Departamento de educación de Gobierno Vasco, “Design of quantum materials for channeling light and electrons (STRAINER)” Project: PIBA_2023_1_0007
 PI together with Alexey Nikitin. **Ph.D. Position for 2 years (50.000 €).**
- 2023-2024** Province of Gipuzkoa (Spain), program I+D Gipuzkoa Next, PI together with Tobias Grass (DIPC), Aitzol Garcia Etxarri (DIPC), Nicolas Loriente (CFM-CISC), and David Casanova (DIPC). Support for travel costs and consumables, for a grand total of **67.000 Euro**.
- 2023-2026** Autonomous Region of Basque Country (Spain), program IKUR—Quantum, “Plan de Activación Tecnologías Cuánticas”, Project “Analogue quantum simulations in moiré low-dimensional materials” led by Lucia Vitali (CFM-CSIC). 1 PostDoc and 1 PhD position.
- 2021-2022** Autonomous Region of Basque Country (Spain), program IKUR—Quantum, “Plan de Activación Tecnologías Cuánticas”, PI together with Román Orús, Geza Giedke, Aran Garcia-Lekue, Maia Garcia-Vergniory, Fernando de Juan, Aitzol Garcia Etxarri, Thomas Fredericksen, Miguel A. Cazalilla, David Casanova. 7 PostDoc position for a grand total of **400.000 Euro**.
- 2021-2022** Province of Gipuzkoa (Spain), program I+D Gipuzkoa Next, “Engineering quantum matter and nanostructures for quantum computation and applications” 2021-CIEN-000070-01, PI together with Aran Garcia-Lekue, Maia Garcia-Vergniory. 2 PhD and 1PostDoc position for a grand total of **106.000 Euro**.
- 2020-2023** Ministerio de Ciencia, Innovación y Universidades, “Spectral and transport properties of quantum materials: Application to disordered conventional and artificial condensed-matter systems”, PI together with Miguel A. Cazalilla, Project: PID2020-120614GB-I00. Support for travel costs and consumables, for a grand total of **96.800 Euro**.
- 2018 - 2021** Ministerio de Ciencia, Innovación y Universidades, “Electronic transport in hybrid structures, low-dimensional materials, superconductors, magnets semiconductors and normal metals”, co-PI together with Sebastian Bergeret, Project: FIS2017-82804-P. Support for travel costs and consumables for a grand total of **60.500 Euro**.
- 2016 - 2019** Departamento de educación, política lingüística, y cultura de Gobierno Vasco, “Spin-Orbit Photonics and Quantum Applications (SOPhoQua)” Project: PI2016-41
 together with Aitzol García-Etxarri, Geza Giedke, Juan José Sáenz.
Ph.D. Position for 3 years and 10.500 Euro in travel costs and consumable.
- 2016-2019** Euskampus PhD position from DIPC/University of Bordeaux. **PhD grant for 3 years** extendable to 4.
- 2016-2019** Euskampus PhD position from DIPC. **PhD grant for 3 years** extendable to 4.
- 2014 - 2018** Ministerio de Economía y Competividad, “Spin transport in hybrid structures: Metals, Superconductors, Graphene and Topological Insulators”, Project FIS2014-55987-P
Ph.D. Position for 3 years and 72.600 Euro in travel costs and consumables
- 2014 - 2019** Ikerbasque Research Fellows Awarded 2014, Tenure Track position by the Ikerbasque Foundations: **180.500 Euro**.
- 2011** International Graduate Academy (IGA) and Hermann Paul School of Language Sciences (HPSL) financial support for the organization of international workshop on “Topological States of Matter”. Support: **10.000 Euro**.
- 2011 - 2015** CSC (China Scholarship Council) Research Grant File No. 201164010,
 “Study of Structural Defects in Carbon-Based Nanostructures”.
 Support: **Ph.D. position for 4 years**.

2010 - 2013 DFG Research Grant [BE 4564/1-1](#),
 “Spin-Effects in Carbon Nanotubes: Investigation of Two- and Three-Terminal Setups”.
Support: 3/4 E 13 (circa **55.000 Euro/annually**) **position for 3 years** and **36.000 Euro** in consumables.

AWARDS

2016 Research fellowship of the University of Aix-Marseille via excellence initiative

2014 - 2019 Ikerbasque Research Fellow, [Ikerbasque foundation of science](#)

1997 - 2001 University of Naples, Italy – [EDISU NAPOLI 1](#) – Student scholarship

PROFESSIONAL & JOURNAL SERVICE

Editor:

- Member of the Editorial Board of Communication Physics since 2019
- Guest Editor for the Special Issue of New Journal of Physics on “Nonequilibrium Fluctuation Relations: From Classical to Quantum” (2013) in collaboration with R. Egger, P. Hänggi, and M. Torwart.
- Guest Editor for the Special Issue of “Journal of Physics: Condensed Matter” on “Special Issue on Electron quantum optics in Dirac materials” (2022) in collaboration with A. De Martino and R. Calvo.

Journal Reviewer:

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|---------------------------------------|------------------------------|----------------------------|
| • Phys. Rev. Lett., A, B, E, X, Appl. | • Nano Lett. | • J. Phys. Condens. Matter |
| • EPL | • J. Phys. A | • Physica B, E |
| • Eur. Phys. J. B | • Superlattices Microstruct. | • Phys. Scr. |
| • New J. Phys. | • Nat. Phys. | • Science |
| • Nature | • Sci. Adv. | • Comput. Phys. Commun. |
| • Nanotechnology | • Commun. Phys | • Sci. Rep. |
| • Quantum Inf. Process. | • Sci. Adv. | • Adv. Mater. |

Funding Agency Reviewer:

- Reviewer for the “Nederlandse Organisatie voor Wetenschappelijk Onderzoek” (NWO), (2017-).
- Reviewer for the “Spanish National Research Agency” (2018-).
- Member of the “ESF College of Expert Reviewers” panel (2016-2019).
- Member of the referee panel of the National Research Council of Romania (2012-2013).
- Member of the referee panel of the EMPAPOSTDOCS, EMPA, Switzerland (2013).
- Member of the referee panel of the European Science Foundation (2009-2010).
- Member of Deutsche Physikalische Gesellschaft.
- Member of the International Advisory Board of the “[Phenikaa Institute for Advanced Study](#)” (PIAS) in Hanoi (Vietnam).

CONFERENCE ORGANISATION

2025 Organizer of the “[19th Capri Spring School on transport in nanostructures with special focus on Novel aspects of superconducting devices](#)” #CSS24 (Anacapri, Italy)

2024 Organiser of the workshop “[Synthetic Electronic Quantum Matter](#)”, #SELEQ (Donostia-San Sebastian, Spain)

2024 Organizer of the “[18th Capri Spring School on transport in nanostructures with special focus on Non-unitary many-body quantum dynamics](#)” #CSS24 (Anacapri, Italy)

2023 Organiser of the workshop “[Opportunities from local noise spectroscopy](#)”, Lorentz Center, (Leiden, Netherland).

- 2023 Organizer of the “[17th Capri Spring School on transport in nanostructures with special focus on New trends in electron interferometry](#)” #CSS23 (Anacapri, Italy)
- 2022 Organizer of the “[16th Capri Spring School on transport in nanostructures with special focus on Moiré and van der Waals heterostructures](#)” #CSS22 (Anacapri, Italy)
- 2022 Organizer of “[International Conference on Superlattices, Nanostructures and Nanodevices 2022](#)”, #ICSNN2022 (Quy Nhon, Vietnam) **Chair** – CANCELLED
- 2021 Organizer of the “[16th Capri Spring School on transport in nanostructures with special focus on Moiré and van der Waals heterostructures](#)” #CSS21 (Anacapri, Italy) – CANCELLED
- 2020 Organizer of the International Workshop on “[Quantum Thermodynamics of Non-equilibrium Systems](#)”, #QTDNEQ20 (Donostia-San Sebastián Spain) – Virtual Event
- 2020 Organizer of “[International Conference on Superlattices, Nanostructures and Nanodevices 2020](#)”, #ICSNN2020 (Quy Nhon, Vietnam) **Chair** – CANCELLED
- 2020 Organizer of the “[16th Capri Spring School on transport in nanostructures with special focus on Moiré and van der Waals heterostructures](#)” #CSS20 (Anacapri, Italy) – CANCELLED
- 2019 Organizer of the International Workshop on “[Designing artificial quantum matter](#)”, #DAQM (Donostia-San Sebastián Spain)
- 2019 Organizer of the “[15th Capri Spring School on transport in nanostructures with special focus on New directions in topological condensed matter physics](#)” #CSS19 (Anacapri, Italy)
- 2018 Organizer of the “[Topological Matter School: Basic to Advanced](#)” #TMS18 (Donostia-San Sebastián Spain)
- 2018 Organizer of the “[14th Capri Spring School on transport in nanostructures with special focus on New directions in superconducting quantum devices](#)” #CSS18 (Anacapri, Italy)
- 2017 Organizer of the “[Topological Matter School: Basic to Advanced](#)” #TMS17 (Donostia-San Sebastián Spain)
- 2017 Organizer of the “[13th Capri Spring School on transport in nanostructures with special focus on Solid-state quantum information processing](#)” #CSS17 (Anacapri, Italy)
- 2016 Organizer of the “[Topological Matter School](#)” #TMS16 (Donostia-San Sebastián Spain)
- 2016 Organizer of the “[12th Capri Spring School on transport in nanostructures with special focus on Driven quantum nanosystems](#)” (Anacapri, Italy)
- 2015 Organizer of the “[11th Capri Spring School on transport in nanostructures with special focus on topological superconductivity](#)” (Anacapri, Italy)
- 2013 Organizer of the “[9th Capri Spring School on transport in nanostructures with special focus on spin transport in low-dimensional systems](#)” (Anacapri, Italy)
- 2012 Organizer of the International Capri Fall Workshop on “[Non-equilibrium processes and fluctuation-dissipation theorems](#)” (Anacapri, Italy)
- 2012 Organizer of the International Workshop on “[Topological States of Matter](#)”, (Freiburg Germany)
- 2012 Organizer of the “[8th Capri spring school on transport in nanostructures with special focus on superconducting hybrid nanostructures](#)” (Anacapri, Italy)
- 2011 Organizer of the “[7th Capri spring school on transport in nanostructures with special focus on topological insulators](#)” (Anacapri, Italy)

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| 2010 | Organizer of the “ 6th Capri spring school on transport in nanostructures with special focus on quantum entanglement in nanostructures ” (Anacapri, Italy) |
| 2009 | Co-organizer of the “ 5th Capri spring school on transport in nanostructures with special focus on non-equilibrium phenomena ” (Anacapri, Italy) |
| 2008 | Co-organizer of the “ 4th Capri spring school on transport in nanostructures with special focus on graphene and electronic correlations in 1D and 2D materials ” (Anacapri, Italy) |
| 2007 | Co-organizer of the “ 3rd Capri spring school on transport in nanostructures with special focus on quantum features of nano-devices ” (Anacapri, Italy) |

TEACHING ACTIVITY

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| Summer term 2019 | <i>Introduction to SPT phases of matter</i> at the “25th Vietnam School of Physics (VSOP25): Quy Nhon, 2019 : Nanophysics ”, ICISE - Quy Nhon (Vietnam). |
| Winter Term 2017 | <i>Introduction to the physics of graphene and other 2D materials</i> at the “23th Rencontres du Vietnam Vietnam school of Physics 2017: Nanophysics”, ICISE - Quy Nhon (Vietnam). |
| Fall term 2013 | Tutor in the exercise group for “ Advanced quantum mechanics ” at the Freie Universität Berlin (Germany). |
| Fall term 2011 | Lecture with exercise (6 hours weekly) “ Introduction to Nanoelectronics ” at the University of Freiburg (Germany). |
| Summer term 2011 | Student seminar “Dirac Fermions in Nanostructures and Topological Quantum Computation” at the University of Freiburg (Germany). |
| Fall term 2010 | Lecture with exercise (5 hours weekly) “ Nanoelectronics: theoretical concepts and computational methods ” at the University of Freiburg (Germany). |
| Summer term 2010 | Student seminar “ Quantendynamik in mesoskopischen Systemen: Auf dem Weg zur Nanoelektronik ” at the University of Freiburg (Germany). |
| Fall term 2008 | Main tutor in the exercise group for “Theoretical Physics II - Electrodynamics” at the University of Freiburg (Germany). |
| Summer term 2008 | Tutor in the exercise group for “Einführung in die Theorie der Nanostrukturen” at the University of Freiburg (Germany). |
| Fall term 2007 | Tutor in the exercise group for “Theoretical Physics I - Introduction to Mechanics” at the University of Freiburg (Germany). |
| Fall term 2006 | Tutor in the exercise group for “Theoretical Physics IV - Quantum Mechanics II” at the University of Regensburg (Germany). |
| Summer term 2006 | Tutor in the exercise group for “Theoretical Physics III - Quantum Mechanics” at the University of Regensburg (Germany). |
| Fall term 2005 | Tutor in the exercise group for “Theoretical Physics IV - Waves and Quanta” at the University of Regensburg (Germany). |
| Summer term 2005 | Tutor in the exercise group for “Theoretical Physics I - Mechanics” at the University of Regensburg (Germany). |
| Fall term 2004 | Tutor in the exercise group for “Theoretical Physics II - Electrodynamics” at the University of Regensburg (Germany). |
| Fall term 2003 | Main tutor in the exercise group for “Electrodynamics” at the University of Naples (Italy). |
| Fall term 2002 | Main tutor in the exercise group for “Electrodynamics” at the University of Naples (Italy). |

TUTOR & CO-TUTOR FOR GRADUATE & UNDERGRADUATE STUDENTS

Tutor & co-tutor for undergraduate theses

- Dipl. Phys. Andreas Pfund (Diploma 2005), University of Regensburg
- Dipl. Phys. Matthias Scheid (Diploma 2006), University of Regensburg
- Dipl. Phys. Manuel Strehl (Diploma 2007), University of Regensburg
- Dipl. Phys. Michael Schulze (Diploma 2012), University of Freiburg
- Dipl. Phys. Linnéa Schätzle, (Diploma 2013), University of Freiburg
- M. Sc. Andreas Inhofer, (Master 2013), University of Freiburg
- M. Sc. Ehud Amitai (Master 2014), Freie Universität Berlin
- M. Sc. Miguel Ángel Jiménez Herrera (Master 2018), University of Basque Country
- M. Sc. Alberto Hijano (Bachelor 2019), University of Basque Country
- M. Sc. Albert Pool (Master 2019), co-tutoring with Cristiane De Morais Smith (Utrecht University)
- B. Sc. Carolina Martinez Strasser (Master 2022), University of Basque Country

Tutor & co-tutor for graduate theses

- Dr. Sergey Smirnov (graduate 2009), University of Regensburg
- Dr. Matthias Scheid (graduate 2010), University of Regensburg
- Dr. Lucia Lenz (graduate 2013), University of Freiburg
- Dr. Bogusz Bujnowski (graduate 2019), University of Basque Country & University of Bordeaux
- Dr. Maria Blanco de Paz (graduate 2022), University of Basque Country
- M. Sc. Miguel Ángel Jiménez Herrera (running graduate thesis), University of Basque Country
- M. Sc. Minh Nguyen Duy Hoang (running graduate thesis), University of Basque Country
- M. Sc. Carolina Martinez Strasser (running graduate thesis), University of Basque Country

LIST OF INVITED TALKS AT UNIVERSITIES, RESEARCH CENTERS & CONFERENCES

Date	"Conference name", <i>place</i> "Talk title"	W/IT/L
09.2024	"Advances in Modern Quantum Science: From Quantum Materials to Quantum Technologies" (Uzbekistan) "Synthetic Momenta: A New Approach to Photonic Topological Physics"	W
09.2024	"Topology and Correlations in Crystals and Quantum Matter: Workshop to Honor Prof. Cristiane Morais Smith's 60th birthday" (France) "Spectral Properties of Non-Hermitian Systems Featuring Impurities and Flat Bands"	W
10.2023	"Opportunities from local noise spectroscopy", Lorentz Center, Leiden (Netherland) "Filling anomaly in obstructed atomic & fragile topological insulators"	W
09.2023	Spring Workshop, University of Basque Country "Exploring Chiral Spin States in Curved Spaces: Insights from Ring Geometries"	W
06.2023	"Nanophotonics of 2D Materials", Donostia-San Sebastián (Spain) "Proposal for tuneable THz detection realized in SWNT quantum dots with broken symmetries"	W
05.2023	Condensed Matter Community Meeting of Nature Springer Editors, <i>online</i> "Exploring Chiral Spin States in Curved Spaces: Insights from Ring Geometries"	IT
11.2022	"Geometric resources for quantum engineering", Sevilla (Spain) "Chiral spin channel in curved graphene <i>pn</i> -junctions"	W
07.2022	Minisymposium on "Complex Quantum Systems", University of Regensburg "Rabi resonances in graphene chiral <i>pn</i> -junctions with spin-orbit coupling"	W
06.2022	On-line Colloquium at the University of Mexico City – Campus Morelos "Abelian and non-Abelian geometric phases in quantum networks"	IT
05.2022	University of Basque Country, Physics Department (Spain) "Tunable geometric phase in graphene quantum dots with spin-orbit coupling"	IT

10.2021	DIPC - UPV/EHU annual quantum meeting, Bilbao (Spain) “Tunable geometric phase in graphene quantum dots with spin-orbit coupling”	W
10.2021	Real-space simulations of topological matter and disordered materials CDM 29 online series “Abelian and non-Abelian geometric phases in quantum networks”	W
05.2021	Nicolaus Copernicus University, virtual seminar at the Quantum Physics Department “High-order topological states in electronic and photonic lattice systems”	IT
04.2021	Dublin Institute For Advanced Studies, virtual seminar at the School of Theoretical Physics “High-order topological states in electronic and photonic lattice systems”	IT
09.2020	CDM-GEFES virtual meeting “Abelian and not-Abelian geometric phases in transport through polygonal structures”	W
03.2020	“Geometric resources for quantum engineering”, Sevilla (Spain) “Spin interference effects in quantum rings in the presence of SU(2) fields”	W
07.2019	“The 25th Vietnam School of Physics (VSOP25): Quy Nhon, 2019 : Nanophysics ”, ICISE - Quy Nhon (Vietnam) – invited lecturer “Introduction to SPT phases of matter”	L
06.2019	“International conference on thermoelectric materials”, Donostia-San Sebastián (Spain) “Quasiparticle cooling using a Topological insulator-Superconductor hybrid junction”	W
01.2019	Instituto de Ciencia de Materiales del CSIC, Madrid (Spain) “Transport properties of excitonic insulator/superconductor hybrid junction”	IT
12.2018	University of Utrecht, Faculty of Science (Netherland) “Solitons in a quasi-one dimensional chain with a flat band”	IT
11.2018	University of Napoli, Physics Department (Italy) “Transport properties of excitonic insulator/superconductor hybrid junction”	IT
09.2018	EMPA, Zurich (Switzerland) “Solitons in a quasi-one dimensional chain with Flat band”	IT
09.2018	“Excitonic insulator: New perspectives in long-range interacting systems”, CECAM– Lausanne (Switzerland). “Transport properties of excitonic insulator/superconductor hybrid junction”	W
01.2018	“X edition of GEFES meeting”, Valencia (Spain) “Transport properties of electron-hole bilayer/superconductor hybrid junction”	W
12.2017	“XIIIth Rencontres du Vietnam Vietnam school of Physics 2017: Nanophysics ”, ICISE - Quy Nhon (Vietnam) – invited lecturer “Introduction to the physics of graphene and other 2D materials”	L
08.2017	“Nanophysics, from fundamental to applications: reloaded”, Quy Nhon (Vietnam). “Transport properties of an excitonic condensate-superconductor hybrid junction”	W
04.2017	University of Napoli, Physics Department (Italy) “Solitons in a quasi-one dimensional chain with a flat band”	IT
03.2017	University of Basque Country, Physics Department (Spain). “Solitons in a quasi-one dimensional chain with spin one”	IT
03.2017	Imperial College London (United Kingdom) – invited talk for a Lecturer position. “Integer pseudo-spin lattices”	IT

02.2017	City, University of London (United Kingdom). “Solitons in a quasi-one dimensional chain with spin one”	IT
03.2016	“NanoSpain 2016”, Logroño (Spain) “Mode splitting in zigzag carbon nanotubes”	W
08.2015	“Workshop MANA - DIPC. “Nanostructures and Complex Functional Materials”, Donostia-San Sebastián (Spain) “Scattering Properties of Defected Carbon-Nanotubes”	W
07.2015	New Trends in Topological Insulators 2015, Donostia-San Sebastián (Spain) “Spin Particle Source (SpPS)”	W
05.2015	University of Würzburg (Germany) “Driven Topological Insulator Quantum Dot: quantized spin-source”	IT
02.2015	University of Braunschweig (Germany) “Driven Topological Insulator Quantum Dot: quantized spin-source”	IT
10.2014	Nanotechnology International Conference (TNT2014), Barcelona (Spain) “Pseudo-spin-dependent scattering in carbon nanotubes”	W
06.2014	Universität Hamburg (Germany) “Driven Topological Insulator Quantum Dot: quantised spin-source”	IT
01.2014	Fraunhofer-IWM, Freiburg (Germany) “Spintronics: a personal overview”	IT
01.2014	Donostia International Physics Center (DIPC). Donostia-San Sebastián (Spain) “Quantum transport in defected carbon-nanotubes”	IT
09.2013	“European Material Research Society (eMRS2013) Fall Meeting”, Warsaw University of Technology (Poland) “Spin-Resolved Transport Properties of Inhomogeneous Graphene Nanostructures”	W
04.2013	“Federico II” University of Naples (Italy) “Flat bands in quasi-one-dimensional and two-dimensional lattices”	IT
03.2013	International workshop on “Flat Bands: Design, Topology and Correlations (Flat2013)”, MPI -PKS Dresden (Germany) “Flat bands in quasi-one-dimensional and two-dimensional lattices”	W
02.2013	University of Freiburg (Germany) – inaugural lecture “Tight-Binding Models: An Inspiring Journey”	IT
04.2012	“Graphene Conference 2012”, Brussels (Belgium) “Spin-Resolved Transport Properties of Inhomogeneous Graphene Nanostructures”	W
03.2012	7th Annual IEEE International Conference on “Nano/Micro Engineered and Molecular Systems”, Kyoto (Japan) “Quantum transport in defected carbon-nanotubes”	W
01.2012	University of Aachen (Germany) “Transport Properties of Dirac-Weyl Electron in Inhomogeneous Spin-Orbit Structure in Graphene”	IT
10.2011	International workshop on “Carbon-based Spintronics”, Dresden (Germany) “Pseudo-spin-dependent scattering in carbon nanotubes”	W
08.2011	University of Freiburg (Germany) “Quantum transport in defected carbon-nanotubes”	IT
04.2011	University of Salerno (Italy) “Quantum transport in carbon-based materials”	IT

10.2010	International workshop on “Quantum coherence and correlations in condensed-matter and cold-atom systems”, Evorà (Portugal) “Topology-induced phase transitions in quantum spin-Hall lattices”	W
10.2010	International workshop on “Emerging Trends in Advanced Correlated Materials”, Capri (Italy) “Topology-induced phase transitions in quantum spin-Hall lattices”	W
05.2010	University of Basel (Switzerland) “Electron tunneling into a quantum wire in the Fabry-Pérot regime”	IT
02.2010	University of Freiburg (Germany) “Massless electrons in a T_3 lattice”	IT
01.2010	University of Augsburg (Germany) “Spin dependent phenomena in graphene”	IT
12.2009	University of Heidelberg (Germany) “Spin dependent phenomena in graphene”	IT
12.2009	ICFO Barcelona (Spain) “Massless electrons in a T_3 lattice”	IT
09.2009	“Federico II” University of Naples (Italy) “Electron scattering in intra-tube quantum-dots”	IT
06.2009	Max-Planck Institute for Solid State Physics, Stuttgart (Germany) “Electron scattering in intra-tube quantum-dots”	IT
05.2009	University of Regensburg (Germany) “Electron tunneling into a quantum wire in the Fabry-Pérot regime”	IT
04.2009	University of Düsseldorf (Germany) “Massless electrons in a T_3 lattice”	IT
04.2009	“5th Capri Spring School on Transport in Nanostructures with special focus on non-equilibrium phenomena”, Anacapri (Italy) “Electron tunneling into a quantum wire in the Fabry-Pérot regime”	W
08.2007	EMPA, Thun (Switzerland) “Electron tunneling into a quantum wire in the Fabry-Pérot regime”	IT
04.2007	“Federico II” University of Naples (Italy) “Spin current in mesoscopic conductors”	IT
09.2006	Workshop of “Graduiertenkolleg 638 - Research School Nonlinearity and Non-equilibrium in Condensed Matter”, Windberg (Germany) “Spin current in mesoscopic conductors”	W
07.2006	University of Freiburg (Germany) “Spin-quantum rectifier”	IT
04.2006	“Federico II” University of Naples (Italy) “Spin-quantum rectifier”	IT
03.2006	“2nd Capri Spring School on Transport in Nanostructures with special focus on quantum noise”, Anacapri (Italy) “Spin-quantum rectifier”	W
06.2004	Scuola Normale Superiore di Pisa (Italy) “Rashba effect in quantum networks”	IT
09.2004	Conference on “New Concepts and Materials for Molecular Electronics and Nanotechnology”, Poznan (Poland) “Rashba effect in quantum networks”	W

06.2004	University of Regensburg (Germany) "Rashba effect in quantum networks"	IT
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