

Personal Data:

Name: Tomás Ramos del Río
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Place of birth: Concepción, Chile
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Employment:

- (5) **Juan-de-la-Cierva Incorporación Postdoctoral fellow** **Starting date:** 01/05/2021
Spanish Research Council (CSIC), Madrid, Spain
- (4) **Marie Curie Fellow** **Starting date:** 01/02/2019
Spanish Research Council (CSIC), Madrid, Spain
- (3) **Juan-de-la-Cierva Formación Postdoctoral fellow** **Starting date:** 01/05/2018
Spanish Research Council (CSIC), Madrid, Spain
- (2) **Postdoctoral Researcher** **Starting date:** 16/12/2016
Spanish Research Council (CSIC), Madrid, Spain
- (1) **PhD Student** **Starting date:** 01/10/2011
*University of Innsbruck, and Institute for Quantum Optics
and Quantum Information (IQOQI) of the Austrian Academy of Sciences, Austria*

Education:

- (3) **PhD in Physics** **Awarded:** 01/07/2016
University of Innsbruck, Innsbruck, Austria.
Advisor: *Prof. Dr. Peter Zoller*
PhD Thesis: “*Chiral Quantum Optics with Spins, Photons, and Phonons*”
“**Pass with distinction**” (best possible grade)
- (2) **MSc in Physics** **Awarded:** 17/04/2011
University of Concepción, Concepción, Chile.
Advisor: *Prof. Dr. Guillermo Rubilar*
MSc Thesis: “*Momentum of light in material media*”
“**Approved with highest distinction**” (best possible grade)
- (1) **BSc in Physics** **Awarded:** 20/12/2008
University of Concepción, Concepción, Chile.
(Ranked #1 in the physics promotion)

Funding received:

- (6) **"Ramón y Cajal" Postdoctoral Contract** **Starting date:** 01/01/2023 (at latest)
Funder: Ministry of Science and Innovation, Spain
Grant ID: RYC2021-032473-I
Budget: 236k€
Funding Period: 5 years
- (5) **"Juan de la Cierva- Incorporación" Postdoctoral Fellowship** **Starting date:** 01/05/2021

Funder: Ministry of Economy, Industry, and Competition, Spain
Grant ID: IJC2019-040260-I
Budget: 93k€
Funding Period: 3 years
Institution: Spanish Research Council (CSIC), Madrid, Spain

(4) Marie-Sklodowska-Curie Postdoctoral Fellowship

Starting date: 01/02/2019

Funder: European Commission (H2020-MSCA-IF-EF-ST)
Grant ID: 798397 & Acronym: MULTIPROB
Budget: 170k€
Funding Period: 2 years
Institution: Spanish Research Council (CSIC), Madrid Spain

(3) "Juan de la Cierva- Formación" Postdoctoral Fellowship

Starting date: 01/05/2018

Funder: Ministry of Economy, Industry, and Competition, Spain
Grant ID: FJCI-2016-29190
Budget: 50k€
Funding Period: 2 years
Institution: Spanish Research Council (CSIC), Madrid, Spain

(2) "Becas Chile" PhD Fellowship

Starting date: 01/10/2011

Funder: National committee of scientific and technological research (CONICYT), Chile
Budget: 84k€
Funding Period: 4 years
Institution: University of Innsbruck, and Institute for Quantum Optics and Quantum Information (IQOQI) of the Austrian Academy of Sciences, Austria

(1) Ureka Research Exchange Program

Starting date: 01/06/2007

Funder: Science Foundation Ireland
Budget: 5k€
Funding Period: 3 months
Institution: University College Cork, group of Prof. Thomas Busch

Preprints:

(5) R. Dassonneville, **T. Ramos**, V. Milchakov, L. Planat, F. Foroughi, C. Naud, W. Hasch-Guichard, J.J. García-Ripoll, N. Roch, and O. Buisson, “*Qubit readout using in-situ bifurcation of a nonlinear dissipative polariton in the mesoscopic regime*”, [arXiv:2210.04793](https://arxiv.org/abs/2210.04793).

(4) **T. Ramos**, A. Gómez-León, J.J. García-Ripoll, A. González-Tudela, D. Porras, “*Directional Josephson traveling-wave parametric amplifier via non-Hermitian topology*”, [arXiv:2207.13728](https://arxiv.org/abs/2207.13728).

(3) A. Gómez-León, **T. Ramos**, A. González-Tudela, D. Porras, “*Non-Hermitian topological phases in traveling-wave parametric amplifiers*”, [arXiv:2207.13715](https://arxiv.org/abs/2207.13715).

(2) L. Pereira, J.J. García-Ripoll, **T. Ramos**, “*Parallel QND measurement tomography of multi-qubit quantum devices*”, [arXiv:2204.10336](https://arxiv.org/abs/2204.10336).

(1) M. Li, J.J. García-Ripoll, **T. Ramos**, “*Scalable multiphoton generation from cavity-synchronized single-photon sources*”, [arXiv:2009.02382](https://arxiv.org/abs/2009.02382).

Publications:

- (20) A. Gómez-León, **T. Ramos**, A. González-Tudela, D. Porras, “*Bridging the gap between topological non-Hermitian physics and open quantum systems*”, [Phys. Rev. A **106**, L011501 \(2022\)](#).
- (19) L. Pereira, J.J. García-Ripoll, **T. Ramos**, “*Complete physical characterization of QND measurements via tomography*”, [Phys. Rev. Lett. **129**, 010402 \(2022\)](#).
- (18) H. Le Jeannic, A. Tiranov, J. Carolan, **T. Ramos**, Y. Wang, M. H. Appel, S. Scholz, A. D. Wieck, A. Ludwig, N. Rotenberg, L. Midolo, J.J. García-Ripoll, A.S. Sørensen, P. Lodahl, “*Dynamical photon-photon interaction mediated by a quantum emitter*”, [Nat. Phys. **18**, 1191 \(2022\)](#).
- (17) A. Gómez-León, **T. Ramos**, D. Porras, A. González-Tudela, “*Decimation technique for open quantum systems: a case study with driven-dissipative bosonic chains*”, [Phys. Rev. A **105**, 052223 \(2022\)](#).
- (16) G. F. Peñas, R. Puebla, **T. Ramos**, P. Rabl, J. J. García-Ripoll, “*Universal deterministic quantum operations in microwave quantum links*”, [Phys. Rev. Applied **17**, 054038 \(2022\)](#).
- (15) **T. Ramos**, J.J. García-Ripoll, D. Porras, “*Topological input-output theory for directional amplification*”, [Phys. Rev. A **103**, 033513 \(2021\)](#).
- (14) H. Le Jeannic, **T. Ramos**, S.F. Simonsen, T. Pregnolato, Z. Liu, R. Schott, A.D. Wieck, A. Ludwig, N. Rotenberg, J.J. García-Ripoll, and P. Lodahl, “*Experimental reconstruction of the few-photon nonlinear scattering matrix from a single quantum dot in a nanophotonic waveguide*”, [Phys. Rev. Lett. **126**, 023603 \(2021\)](#).
- (13) Y. Chougale, J. Talukdar, **T. Ramos**, and R. Nath, “*Dynamics of Rydberg excitations and quantum correlations in an atomic array coupled to a photonic crystal waveguide*”, [Phys. Rev. A **102**, 022816 \(2020\)](#).
- (12) R. Dassonneville, **T. Ramos**, V. Milchakov, L. Planat, E. Dumur, F. Foroughi, J. Puertas, S. Leger, K. Bharadwaj, J. Delaforce, C. Naud, W. Hasch-Guichard, J. J. García-Ripoll, N. Roch, and O. Buisson, “*Fast high fidelity quantum non-demolition qubit readout via a non-perturbative cross-Kerr coupling*”, [Phys. Rev. X **10**, 011045 \(2020\)](#).
- (11) **T. Ramos**, J.J. García-Ripoll, “*Correlated Dephasing Noise in Single-photon Scattering*”, [New. J. Phys. **20**, 105007 \(2018\)](#). **Focus on Nanoscale Quantum Optics**
- (10) P. Eder, **T. Ramos**, J. Goetz, M. Fischer, S. Pogorzalek, J. Puertas-Martínez, E.P. Menzel, F. Loacker, E. Xie, J.J. Garcia-Ripoll, K.G. Fedorov, A. Marx, F. Deppe and R. Gross, “*Quantum probe of an on-chip broadband interferometer for quantum microwave photonics*”, [Supercond. Sci. Technol. **31** 115002 \(2018\)](#). **SuST Highlight of 2018**
- (9) **T. Ramos**, J.J. García-Ripoll, “*Multiphoton Scattering Tomography with Coherent States*”, [Phys. Rev. Lett. **109**, 153601 \(2017\)](#).
- (8) B. Vermersch*, **T. Ramos***, P. Hauke, P. Zoller, “*Implementation of chiral quantum optics with Rydberg and trapped-ion setups*”, [Phys. Rev. A **93**, 063830 \(2016\)](#). *these authors contributed equally. **Editors' Suggestion**
- (7) **T. Ramos***, B. Vermersch*, P. Hauke, H. Pichler, P. Zoller, “*Non-Markovian Dynamics in Chiral Quantum Networks with Spins and Photons*”, [Phys. Rev. A **93**, 062104 \(2016\)](#). *these authors contributed equally
- (6) H. Pichler, **T. Ramos**, A. J. Daley, P. Zoller,

“Quantum Optics of Chiral Spin Networks”, [Phys. Rev. A 91, 042116 \(2015\)](#). **Editors' Suggestion**

(5) **T. Ramos**, G. F. Rubilar, Y. N. Obukhov,

“First principles analysis of the Abraham-Minkowski controversy for the momentum of light in general linear media”, [J. Opt. 17, 025611 \(2015\)](#) **JOPT Highlight of 2015**

(4) **T. Ramos**, H. Pichler, A. J. Daley, P. Zoller, “Quantum Spin-Dimers from Chiral Dissipation in Cold Atom Chains”, [Phys. Rev. Lett. 113, 237203 \(2014\)](#).

(3) **T. Ramos**, V. Sudhir, K. Stannigel, P. Zoller and T. J. Kippenberg,

“Nonlinear quantum Optomechanics via individual intrinsic two-level defects”, [Phys. Rev. Lett. 110, 193602 \(2013\)](#). **Editors' Suggestion**

(2) Y. N. Obukhov, **T. Ramos**, G. F. Rubilar,

“Relativistic Lagrangian model of a nematic liquid crystal interacting with an electromagnetic field”, [Phys. Rev. E 86, 031703 \(2012\)](#).

(1) **T. Ramos**, G. F. Rubilar, Y. N. Obukhov,

“Relativistic analysis of the dielectric Einstein box: Abraham, Minkowski and total energy-momentum tensors”, [Phys. Lett. A 375, 1703 \(2011\)](#).

Participation in conferences:

(32) **Superqulan International Workshop**

Date: Sep'22

Technical University of Vienna, Vienna, Austria

Poster: “Directional broadband amplification via a topological Josephson junction array”

(31) **Superconducting qubits and algorithms (SQA) conference**

Date: Aug'22

IQM, Helsinki, Finland

Talk: “Directional broadband amplification via a topological Josephson junction array”

(30) **Quantum Microwaves, Heat Transfer and Many-Body Physics in Superconducting Devices**

Date: May'22

Abdus Salam International Center (ICTP), Trieste, Italy

Talk: “Directional broadband amplification via a topological Josephson junction array”

(29) **March Meeting 2022**

Date: Mar'22

American Physical Society, Chicago, USA

Talk: “A topological Josephson traveling-wave parametric amplifier”

(28) **QUENOCOBA Workshop**

Date: Mar'22

Max Planck Institute for Quantum Optics, Garching, Germany

Poster: “A topological superconducting parametric amplifier”

(27) **Kick-off Meeting of the NanoQuCo Synergy project**

Date: Nov'21

Spanish Research Council (CSIC), Madrid, Spain

Talk: “Probing the two-scattering matrix of complex quantum emitters”

- (26) **Waveguide QED conference** **Date:** Jun'21
Online Talk: "Multiphoton probing of complex quantum emitters & complete tomography of quantum non-demolition detectors". Available on YouTube [here](#) and [here](#).
- (26) **APS division of atomic, molecular, and optical physics (DAMOP)** **Date:** Jun'21
Online Talk: "Multiphoton probing of complex quantum emitters".
- (25) Meeting of the Spanish Quantum Information Network (**ICE-6**) **Date:** May'21
Online Talk: "Topological input-output theory for directional amplification". Available on YouTube [here](#).
- (24) **APS March Meeting 2021** **Date:** Mar'21
Online Talk: "Scalable multiphoton generation from cavity-synchronized single-photon sources". Available on YouTube [here](#).
- (23) **737. WE-Heraeus-Seminar:** **Date:** Jan'21
"Advances in Scalable Hardware Platforms for Quantum Computing"
Online Poster: "Scalable multiphoton generation via cavity-synchronized single-photon sources".
- (22) **APS division of atomic, molecular, and optical physics (DAMOP)** **Date:** Jun'20
Online Talk: "Scattering tomography of nanophotonic devices". Available on YouTube [here](#).
- (21) **IQOQI-CSIC Workshop** **Date:** Nov'19
Talk: "Scattering Tomography of Nanophotonic Devices"
- (20) **Quantum Simulation and Computation** **Date:** Oct'19
ICMAT-CSIC, Autonomous University of Madrid, Madrid
- (19) **C3QS: Coherent Control of Complex Systems** **Date:** Apr'18
Okinawa Institute of Technology, Okinawa, Japan
Talk: "New Spectroscopic Methods in Quantum Microwave Photonics: Accessing Correlated noise and Multiphoton Processes"
- (18) **Quantum Simulation and Computation** **Date:** Feb'18
University of the Basque Country, Bilbao, Spain
Poster: "New Spectroscopic Methods in Quantum Photonics"
- (17) **Spring Meeting 2018 of the German Physical Society** **Date:** Mar'18
Technical University of Berlin, Berlin, Germany
Talk: "New Spectroscopic Methods in Quantum Microwave Photonics: Accessing Correlated noise and Multiphoton Processes"
- (16) **Numerical Methods in Quantum Optics 2018** **Date:** Jan'18
Max Planck Institute for Quantum Optics, Garching, Germany
Talk: "Accessing Correlated Noise via Single-Photon Scattering"
- (15) **NIM conference on Resonator QED** **Date:** Ago'17

Cluster of Excellence "Nanosystems Initiative Munich" (NIM)

Poster: *"Multi-photon scattering tomography with coherent states"*

(14) Workshop of the network of quantum information in Spain (ICE-4) **Date:** Jul'17

Spanish Research Council (CSIC), Madrid, Spain

Poster: *"Multi-photon scattering tomography with coherent states"*

(13) 24th Central European Workshop on Quantum Optics **Date:** Jun'17

Technical University of Denmark (DTU), Lyngby, Denmark

Poster: *"Multi-photon scattering tomography with coherent states"*

(12) Workshop on quantum light-matter interactions in low dimensions **Date:** May'17

The Institute of Photonic Sciences (ICFO), Barcelona, Spain

Poster: *"Multi-photon scattering tomography with coherent states"*

(11) SFB Meeting **Date:** Dec'15

Atominstytut, Vienna, Austria

Poster: *"Beyond Markov with Chiral Waveguides of Rydberg atoms or trapped ions"*

(10) Second International UQUAM Workshop **Date:** Sep'15

University of Innsbruck, Austria

Poster: *"Beyond Markov with Chiral Waveguides of Rydberg atoms or trapped ions"*

(9) SFB Meeting **Date:** Mar'15

University of Innsbruck, Innsbruck, Austria

Talk: *"Quantum Optics of Chiral Spin Networks"*

(8) International workshop on quantum coherence and decoherence II **Date:** Ago'14

University of Antioquia, Medellín, Colombia

Talk: *"Quantum spin-dimers from chiral dissipation and an atomic implementation"*

(7) First International UQUAM Workshop **Date:** Apr'14

Venice International University, Italy

Talk: *"Chiral system-reservoir interaction with a spin-orbit coupled BEC"*

(6) RTG1729-International Conference **Date:** Sep'13

Visselhövede, Germany

Poster: *"Nonlinear Quantum Optomechanics via Individual Intrinsic Two-Level Defects"*

(5) SFB Meeting **Date:** Jul'13

University of Innsbruck, Austria

Talk: *"Nonlinear Quantum Optomechanics via Individual Intrinsic Two-Level Defects"*

(4) 519th WE-Heraeus-Seminar, "Hybrid Quantum Systems" **Date:** Nov'12

Physikzentrum, Bad Honnef, Germany

Poster: *"Signatures of coherent coupling to single two-level defects in cavity optomechanics"*.

Awarded with the poster prize of the conference

(3) DPG Physics School on Quantum Gases in Dilute Atomic Vapour **Date:** Mar'11

Physikzentrum, Bad Honnef, Germany

(2) 475th WE-Heraeus-Seminar **Date:** Mar'11

Physikzentrum, Bad Honnef, Germany

Talk: *"Relativistic analysis of the dielectric Einstein box: Abraham, Minkowski, and total energy-momentum tensors"*

(1) Symposium of the Chilean Physical Society (SOCHIFI) **Date:** Nov'08
 Federico Santa María University, Valparaíso, Chile
Poster: *"Inhibition of Spontaneous emission in patterned Fermi seas"*

Seminars during group visits or online:

(18) Theory Seminar (invited by Dr. M. Lacki) **Date:** Abr'22
 Jagiellonian University, Krakov, Poland
Online talk: *"Topological amplification in photonic lattices: Theory and realizations"*

(17) Theory Seminar (invited by Prof. P. Orellana) **Date:** Dec'21
 Federico Santa María University, Santiago, Chile
Online talk: *"Probing the two-photon scattering matrix of complex quantum emitters"*

(16) Quantum Glue Meetings (invited by Dr. E. Rico) **Date:** Mar'21
 University of the Basque Country, Bilbao, Spain
Online talk: *"Topological input-output theory for directional amplification"*

(15) Quantum Optics Seminar (invited by Dr. C. Rusconi) **Date:** Nov'20
 Max Planck Institute for Quantum Optics, Garching, Germany
Online talk: *"Multiphoton generation and probing for photonic quantum information processing"*

(14) Theory Seminar at Institute Néel (invited by Prof. O Buisson) **Date:** Sep'19
 Institute Néel, Grenoble, France
"Characterizing Photon-photon Interactions and Correlated Noise in Nanophotonic Systems"

(13) Seminar in Prof. G. Kirchmair Group **Date:** Mar'19
 Institute for Quantum Optics and Quantum Information (IQOQI), Innsbruck, Austria
*"New Spectroscopic Methods in Quantum Photonics:
 Accessing Multiphoton Processes and Correlated noise"*

(12) Quinfog Seminar **Date:** Oct'18
 Institute for Fundamental Physics, Spanish Research Council (CSIC), Madrid, Spain
*"New Spectroscopic Methods in Quantum Photonics:
 Accessing Multiphoton Processes and Correlated noise"*

(11) USACH Seminar (invited by Prof. F. Herrera) **Date:** Jun'18
 University of Santiago, Santiago, Chile
*"New Spectroscopic Methods in Quantum Photonics:
 Accessing Multiphoton Processes and Correlated noise"*

(10) UdeC Seminar (invited by Prof. A. Delgado) **Date:** Jun'18
 University of Concepción, Concepción, Chile
*"New Spectroscopic Methods in Quantum Photonics:
 Accessing Multiphoton Processes and Correlated noise"*

(9) Universidad Mayor Seminar (invited by Prof. R. Coto) **Date:** Jun'18
 Universidad Mayor, Santiago, Chile
*"New Spectroscopic Methods in Quantum Photonics:
 Accessing Multiphoton Processes and Correlated noise"*

(8) Seminar in Prof. A. Knorr Group (invited by Dr. A. Carmele) **Date:** May'18
 Free University of Berlin, Berlin, Germany
"New Spectroscopic Methods in Quantum Photonics:"

Accessing Multiphoton Processes and Correlated noise

(7) **Seminar in Prof. F. Nori Group** **Date:** May'18
 RIKEN Institute, Saitama, Tokyo, Japan
*"New Spectroscopic Methods in Quantum Photonics:
 Accessing Multiphoton Processes and Correlated noise"*

(6) **Seminar in Prof. V. Sandoghdar Group** **Date:** Jan'18
 Max Planck Institute for the Science of Light, Erlangen, Germany
*"New Spectroscopic Methods in Quantum Photonics:
 Accessing Multiphoton Processes and Correlated noise"*

(5) **Cefop-Udec Seminar** **Date:** Ago'16
 University of Concepción, Chile
"Chiral Quantum Optics with Spins, Photons, and Phonons"

(4) **IFF-CSIC Seminar** (invited by Dr. JJ. García-Ripoll) **Date:** Jun'16
 Institute for Fundamental Physics, Spanish Research Council, Madrid, Spain
"Chiral Quantum Optics with Spins, Photons, and Phonons"

(3) **Seminar in Prof. M. Oberthaler Group** **Date:** Oct'14
 University of Heidelberg, Germany.
"Quantum spin-dimers from chiral dissipation and an atomic implementation"

(2) **JQI Special Seminar in Prof. T. Porto Group** **Date:** Sep'14
 Joint Quantum Institute, Washington, USA
"Quantum spin-dimers from chiral dissipation and an atomic implementation"

(1) **Cefop Seminar** **Date:** Ago'13
 University of Concepción, Chile
"Nonlinear Quantum Optomechanics via Individual Intrinsic Two-Level Defects"

Research Visits:

(8) **Institute Néel**, Grenoble, France (Prof. O. Buisson Group) **Date:** Sep'19

(7) **University of Innsbruck & IQOQI**, Austria (Prof. G. Kirchmair Group) **Date:** Mar'19

(6) **Niels Bohr Institute**, Copenhagen, Denmark (Prof. P. Lodahl Group) **Date:** Oct'17

(5) **Walther Meissner Institute**, Munich, Germany (Prof. R. Gross Group) **Date:** Ago'17

(4) **Max Planck Institute for Quantum Optics**, Munich (Prof. J.I. Cirac Group) **Date:** Jun'15

(3) **Atomic Institute**, Vienna, Austria (Prof. A. Rauschenbeutel Group) **Date:** May'15

(2) **EPFL Lausanne**, Switzerland (Prof. T. Kippenberg Group) **Date:** Apr'12

(1) **Center for Scientific Studies (CECS)**, Valdivia, Chile (Prof. J. Zanelli) **Date:** Mar'09

Awards and Honors:

(4) **Poster Prize** **Awarded:** Nov'12
 Physikzentrum, Bad Honnef, Germany

Prize for the best poster at the 519. WE-Heraus-Seminar on “Hybrid Quantum Systems”

(3) **“University of Concepción” Award** **Awarded:** Apr’11
Universidad de Concepción, Concepción, Chile.

Best average grade during the physics career in the university (6.6 in the scale from 1 to 7)

(2) **Academic Excellence Award** **Awarded:** Dec’04
Deutsche Schule Concepción, Concepción, Chile.

Best average grade during the high-school studies (6.8 in the scale from 1 to 7)

(1) **Scientific Area Award** **Awarded:** Dec’04
Deutsche Schule Concepción, Concepción, Chile.

Prize for the most motivated student in the science area during the high-school studies

Referee Experience:

Physical Review Letters, Physical Review A, New Journal of Physics, Journal of Physics B, Communications Physics.

Project Evaluator:

Fund for Scientific and Technological Research of the Republic of Argentina (CONCYT).

Memberships:

[Spanish Royal Physics Society](#) (Membership code 6132).

Supervising activities:

(2) Co-director of PhD thesis of Luciano Pereira **Period:** Oct’19-Present
Autonomous University of Madrid
Project: “Complete quantum Tomography of Non-demolition detectors” (funded by BECAS CHILE)

(1) Co-director of PhD work of Ming Li **Period:** Oct’18-Feb’20
Beijing Normal University
Project: “Synchronization of single-photon sources” (*Funded by scholarship of the Chinese State*)

Outreach activities:

(1) The **“power of light”** (Week of Science, Madrid, Spain) **Date:** Nov’19
Creation and broadcast of activity to highlight the importance of light and optical technologies in our modern society. Available on Youtube [here](#).

Mentoring and teaching activities:

(4) Teaching Assistant in **Quantum Mechanics Course** **Period:** Mar’10-Jul’10
Bachelor in Physics, University of Concepción, Concepción, Chile

(3) Teaching Assistant in **Modern Physics Course** **Period:** Mar’09-Jul’09
Bachelor in Physics, University of Concepción, Concepción, Chile

(2) Teaching Assistant in **Calculus Course** **Period:** Mar’07-Jul’07
Bachelor in Physics, University of Concepción, Concepción, Chile

(1) Teaching Assistant in **Calculus Summer Course**
Bachelor in Physics, University of Concepción, Concepción, Chile

Period: Dec'06- Jan'07

Participation in Projects:

(9) **Nanophotonics for Quantum Computing (NanoQuCo-CM)**,
Principal Investigators: F.J. García-Vidal (UAM), J.J. García-Ripoll (IFF-CSIC)
Funder: Proyecto Sinérgico CAM 2020, Ref.: Y2020/TCS-6545
Period: 2021-2023
Budget: 630k€
Participation: Collaborator

(8) **Superqulan**
Principal Investigators: P. Rabl (TU Wien), J.J. García-Ripoll (IFF-CSIC), A. Wallraff (ETH Zurich), J.I Cirac (MPQ)
Funder: European Union (Horizon 2020), Ref: FET-OPEN Project ID 899354
Period: 2020-2022
Budget: 393k€ (CSIC node)
Participation: Collaborator

(7) **Frontiers in Quantum Simulation**
Principal Investigators: D. Porrás and A. González-Tudela
Funder: Proyectos de I+D Generación de Conocimientos (PGC2018-094792-B-I00)
Period: 2019-2021
Amount: 180k€
Participation: Collaborator

(6) **Quantum Information Technologies in Madrid**
Principal Investigator: M. A. Martín-Delgado
Funder: Regional Research and Innovation Network, CAM PRICYT (QUITEMAD-CM)
Period: 2019-2022
Amount: 120k€ (CSIC node)
Participation: Collaborator

(5) **Tecnologías cuánticas con qubits y campos (FIS2015-70856-P)**
Principal Investigator: Juan José García Ripoll
Funder: MINECO (Plan Nacional de Investigación Fundamental No Orientada)
Budget: 84.2k€
Participation: Researcher

(4) **Many-body quantum Systems of cold atoms, molecules, and ions (SFB FOQUS F4016)**
Principal investigator: P. Zoller, M. Baranov. and M. Dalmonte
Funder: Austrian Science Fund (FWF)
Participation: Researcher

(3) **Ultracold Quantum Matter (ERC Synergy Grant UQUAM)**
Principal Investigators: I. Bloch, J. Dalibard, P. Zoller, E. Altman
Funder: European Research Council (ERC)
Participation: Researcher

(2) **EU integrating project SIQS (Simulators and Interfaces with Quantum Systems)**
Principal Investigators: T. Calarco; P. Treutlein; P. Zoller; et al.
Funder: European Commission
Type of participation: Team member

(1) **EU integrating project AQUTE** (Atomic Quantum Technologies)

Principal Investigators: T. Calarco, I. Cirac, I. Bloch, P. Zoller, et al.

Funder: European Commission

Type of participation: Team member

Language Skills:

Spanish: Mother Tongue

English: Fluent

German: Intermediate

Last Update: 24/10/2022