

Jesús David Cifuentes Pardo

Curriculum Vitae

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Education

- 2017 – **M.Sc. in Physics**, *Institute of Physics, Universidade de São Paulo (IFUSP)*, São Paulo, SP, Brasil.
- 2012 – 2016 **B.Sc. in Physics**, *Universidad de los Andes*, Bogotá, Colombia.
GPA: 4.46/ 5.00
- 2013 – 2016 **B.Sc. in Mathematics**, *Universidad de los Andes*, Bogotá, Colombia.
GPA: 4.46/5.00
- 2011 **High School Diploma**, *Colegio Corazonista*, Bogotá, Colombia.
Graduated with honors.

Research

- 2017 – **Master's Research Project: "Indirect exchange and Kondo interactions of Majorana-double quantum dot systems"**, *Advisor: Luis Gregório Dias*.
- 2016 **Thesis in Physics: "Understanding Topological order in 1D fermion chains"**, *Advisor: Andrés Reyes Lega*.
Grade: 4.80/5.00
- 2016 **Thesis in Mathematics: "On Gauging Symmetries of 2D Topological Quantum Field Theories"**, *Advisor: César Galindo*.
Grade: 5.00/5.00

Research Interests

- Topological States of Matter
- Quantum Computing
- Quantum Information Theory

Important courses and seminars:

1. Topological Quantum Matter from Theory to Applications
2. Information Theory for Physicist
3. Workshop on Mathematical Structure and Foundations of Quantum Physics

Awards

- 2017 – 2019 **Scholarship(CNPq)** for Master studies in Physics at the USP

- 2011 Participant of the **52th International Mathematical Olympiad (IMO)**, Netherlands
- 2012 First place at **National Undergraduate Mathematical Olympiad**, Colombia
- 2011 First place at **National Physics Olympiad** (High school), Colombia

Events

- July 2016 **Journeys on Theoretical Physics**, *IFT-Perimeter-SAIFR*, Sao Paulo, Brasil.
- June 2016 **Non-Commutative Geometry**, *Universidad Javeriana*, Villa de Leyva, Colombia.
- May 2016 **Random Geometries**, *8th School on Mathematical Physics*, Universidad de los Andes, Bogotá , Colombia.
- July 2015 **Geometrical, Algebraical and Topological Methods for Quantum Field Theory**, *Universidad de los Andes*, Villa de Leyva, Colombia.
- June 2015 **Workshop on Mathematical Structure and Foundations of Quantum Physics**, Universidad de los Andes, Bogotá , Colombia.
Talk on : "The GNS construction: An algebraic Formalism for Quantum Physics".
- May 2015 **Topological Quantum Matter: From Theory to Application**, *7th School on Mathematical Physics*, Universidad de los Andes, Bogotá , Colombia.

Experience

- 2014, 2016 **Teaching Assistant of Linear Algebra I**, *Department of Mathematics*, Universidad de los Andes, Bogotá.
- 2015 **Co-founder of the Student Seminar on Theoretical Physics**, *Universidad de los Andes*, Bogotá.
- 2013, 2015 **Teaching Practice in Physics**, *Department of Physics*, Universidad de los Andes, Bogotá.
- 2012,2013, 2014 **Instructor in High School Mathematical Olympiads**, *Olimpiadas Colombianas de Matemáticas*, Bogotá.

Skills

Physics tests

- GRE Subject in Physics Scaled score: 820 , Percentile: 74
- EUF Score: 7.9 , Classification: 4

Languages

- Spanish Mother tongue
- English Fluent. Toefl iBT: 96
- Reading: 25 , Listening: 24, Speaking: 23 , Writing: 24
- Portuguese Basic: Level of proficiency A2

Programing Languages

Advanced: Python, Latex , Matlab

Intermediate: Java, R , C

Basic: Mathematica

Operating Systems

Advanced: Ubuntu, Windows

Academic References

Andrés Fernando Reyes Lega Ph.D.

Universidad de Los Andes

Associate Professor

Department of Physics

Universidad de Los Andes

E-mail: anreyes@uniandes.edu.co

Luis Gregório Dias Ph.D.

Universidade de São Paulo (USP)

Assistant Professor

Depto. de Física dos Materiais e Mecânica

Instituto de Física - USP

E-mail: luisdias@if.usp.br

César Galindo Ph.D.

Universidad de Los Andes

Associate Professor

Department of Mathematics

Universidad de Los Andes

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