## Gonzalez L. Eduardo

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Information Padova, Italy egonzalez@pd.infn.it

EDUCATION University of Padova, Padova, Italy

Post-doc at the Quantum Theory Group Until today

## Scuola Internazionale Superiore di Studi Avanzati, Trieste, Italy

## Statistical Physics PhD student

Oct. 2021

Dissertation: Statistical physics of constrained and long-range interacting quantum systems

## International Centre for Theoretical Physics, Trieste, Italy

**Postgraduate Diploma Programme**, Condensed Matter Physics Sep. 2017 Dissertation: Influence of the cobalt phase on the electronic structure of graphene on cobalt

## Higher Institute of Technologies and Applied Science, Havana, Cuba

B.Sc., Nuclear Physics, 5 years course.

May 2014

Dissertation: Study of Threshold displacement energies in  ${\rm BaTiO_3}$  using Molecular dynamics.

## RESEARCH Interests

Condensed Matter and Statistical Physics, Quantum Experiments, Strongly Correlated Systems, Data Analysis, Monte Carlo techniques, Scientific Computing

## SKILLS

# **Programming**

- C/C++
- Bash
- PHP
- Qt

- Gnuplot
- Root
- LATEX
- Git

# Prosecution of data and work report

#### Others

- Servers configuration in Linux
- Web development
- Advanced user in Linux Systems

## RESEARCH EXPERIENCE

# Research Assistant

Sept 2014 to 2016

Physics Department,

Centre of Technological Applications and Nuclear Development

Supervisor: Yamiel A. Alfonso, Ph.D

#### LANGUAGES

## Mother tongue

• Spanish

## Other language(s)

UNDERSTANDING		SPEAKING		WRITING
Listening	Reading	Spoken interaction	Spoken production	
English				
C1	C1	C1	C1	B2
Italian				
C1	C1	B1	A2	A2

# REFEREED JOURNAL PUBLICATIONS

- E. Gonzalez-Lazo, M. Heyl, M. Dalmonte, A. Angelone; Finite-temperature critical behavior of long-range quantum Ising models. arXiv:2104.15070 [condmat.stat-mech]
- Piotr Sierant, Eduardo Gonzalez Lazo, Marcello Dalmonte, Antonello Scardicchio, Jakub Zakrzewski; Constraints induced delocalization. arXiv:2103.14020 [cond-mat.dis-nn]
- Federica Maria Surace, Matteo Votto, Eduardo Gonzalez Lazo, Alessandro Silva, Marcello Dalmonte, and Giuliano Giudici; Exact many-body scars and their stability in constrained quantum chains. Phys. Rev. B 103, 104302, (2021)
- Jugovac M., Genuzio F., Gonzalez E., Stojić N., Zamborlini G., Feyer V., Mentes T.O., Locatelli A., Schneider C.M.; Role of carbon dissolution and recondensation in graphene epitaxial alignment on cobalt. Carbon 152, 489-496, (2019)
- Cruz C. M., González E., Rodríguez A., Guzmán F., Abreu Y., Piñera I., Leyva A.; Methodology trends on gamma and electron radiation damage simulation studies in solids under high fluency irradiation environments. Nuclear Instruments and Methods in Physics Research, Section A, 865, 32-34, (2017)
- 6. E. Gonzalez, C.M. Cruz, A. Rodriguez, F. Guzman, Y. Abreu, I. Pinera, A. Leyva.; Effects of vacancies on atom displacement threshold energies calculations through Molecular Dynamic Methods in BaTiO<sub>3</sub>. Nuclear Instruments and Methods in Physics Research Section A, (2017).
- E. Gonzalez, Y. Abreu, C.M. Cruz, I. Pinera, A. Leyva.; Molecular-dynamics simulation of threshold displacement energies in BaTiO<sub>3</sub>. Nuclear Instruments and Methods in Physics Research B, 358, (2015), 142-145.
- 8. C. M. Cruz, A. Rodríguez, I. Pinera, D. Damiani, Y. Abreu, E. Gonzalez, M.D. Durrutí, M. Hernández, A. Leyva, A. Chávez, J.M. Yáñez-Limón; Gamma Radiation Damage Evaluation Studies on Ferroelectric La and Nb doped PZT Related Ceramics. Proceedings of the XV Workshop on Nuclear Physics and IX International Symposium on Nuclear and Related Techniques. WONP-NURT'2015, Havana, Cuba, 2015. pp. 221-225. (ISBN 978-959-300-069-7).
- E. Gonzalez, Y. Abreu, C. M. Cruz, I. Pinera, A. Leyva.; Study of radiation damage in BaTiO<sub>3</sub>, using Molecular-dynamics simulations. Proceedings of the XV Workshop on Nuclear Physics and IX International Symposium on Nuclear and Related Techniques. WONP-NURT'2015, Havana, Cuba, 2015. pp. 217-220. (ISBN 978-959-300-069-7).

AWARDS Programming Awards

• Participating as a contestant in the **ACM-ICPC Caribbean Finals**, Havana, Cuba Nov 2012 and 2013

#### Presentations

- XV Workshop on Nuclear Physics and IX International Symposium on Nuclear and Related Techniques . WONP-NURT, Havana, Cuba Feb 2015
- Physics and Applications of High Brightness Beams. An ICFA endorsed workshop.
   Havana, Cuba
   March 28-April 1, 2016
- Korrelationstage 2021 Dresden, Germany April, 2021