Gonzalez L. Eduardo

CONTACT V. Marzolo, 8 Web Page

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

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.

Dissertation: Study of Threshold displacement energies in BaTiO₃ using Molecular dynamics.

RESEARCH INTERESTS

Condensed Matter and Statistical Physics, Quantum Experiments, Strongly Correlated Systems, Data Analysis, Tensor Networks and Monte Carlo methods, 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

Oct. 2021

May 2014

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 BaTiO₃. 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 BaTiO₃. 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 BaTiO₃, 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