

Jose Gustavo Bravo Flores

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Education

2021 – Present **■ M.S. Physics, The University of Texas at El Paso, USA.**

2015 – 2020 **■ B.S. (Hons) Physics, University of Sonora, Mexico.**

One semester abroad at **University of Santiago of Chile, Chile.**

Thesis title: *Quantum tunneling simulations for gaussian waves.*

- Development of the computational tool utilized on the research project.
Language: FORTRAN.
- Comparison of the tunneling factors obtained from numerical integration against traditional quantum tunneling formulas.
- Analysis of Hartman effect and wave packages lag.

Assistanships

June 2021 – Present **■ Graduate Research Assistant.** Department of Physics, The University of Texas at El Paso. (as a M.S. student)

January 2021 – May 2021 **■ Graduate Teaching Assistant.** Department of Physics, The University of Texas at El Paso. (as a M.S. student)

September 2017 – May 2020 **■ Undergraduate Teaching Assistant.** Department of Physics, University of Sonora, Mexico.

January 2017 – May 2017 **■ Undergraduate Research Assistant.** Department of Physics, University of Sonora, Mexico.

Research Publications

Oral Presentations

- 1 Bravo, G., Johnson, A., Withanage, K., Jackson, K. & Pederson, M. (2022). *A Novel Pathway from DFT to CI* [American physical society March Meeting 2021, Chicago, Illinois. (Talk)].
- 2 Lasode, P., Bravo, G., Rivera, R., Woodruff, G., Garcia, C., Glezakou, O., Alexandra, G. & Pederson, M. (2022). *Quantum Now: Minimalist Methods for Quantum Calculations and Experiential Learning* [American Physical Society March Meeting 2021, Chicago, Illinois. (Talk)].
- 3 Bravo, G., Cornelio, R., Corella, A., Gomez, R., Castro, P. & Rosas, A. (2019). *Modulation of the correlation factor in the interference of electromagnetic fields using a liquid crystal compensator.* [Mexican Physical Society LXII National Physics Meeting 2019, Villahermosa, Tabasco. (Poster)].



Skills

Languages **■ Strong reading, writing and speaking competencies for English.**
First language: Spanish.


Scientific computing **■ Fortran, Latex, Mathematica, Python.**

Professional **■ Academic research, teaching, detail oriented, team player.**



Awards and Achievements



- 2021  Summer research funding from the graduate school department, The University of Texas at El Paso, to conduct research between July and August of 2021.
- 2022  Travel grant from the department of physics, The University of Texas at El Paso, to attend APS March meeting, Chicago, Illinois.



Memberships

-  Member of American Physical Society (APS).

References

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