# Jose Gustavo Bravo Flores

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Website

GitHub

#### **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 simmulations 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 (Author)**

- 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)].
- 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)].

#### **Oral Presentations (Co-author)**

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)].

## **Skills**

Languages

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

Scientific computing

Fortran, Latex, Mathematica, Python.

## Skills (continued)

Professional

- Academic research, teaching, detail oriented, team player.
- Certifications
- ▶ Physical Science Responsible Conduct of Research (Record ID: 49885410) Master in Office Certification

## **Awards and Achievements**

- Summer research funding from the graduate school department, The University of 202 I Texas at El Paso, to conduct research between July and August of 2021.
- Travel grant from the department of physics, The University of Texas at El Paso, to 2022 attend APS March meeting, Chicago, Illinois.
- Grant from UNAM to attend UNAM's XXVII Summer School in Physics at Mexico 2019 city and Cuernavaca.

## Memberships

■ Member of American Physical Society (APS).

#### References

Prof. Koblar A. Jackson Department of Physics Central Michigan University, Mt. Pleasant MI-48859.

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