

# Ernesto García Alfonso

PhD student

November 14th, 1996

Toulouse, France

+33 762995175

@ ernestogarciaalfonso96@gmail.com

https://github.com/ ErnestoGarciaALfonso

> https://www. researchgate.net/profile/ Ernesto-Garcia-Alfonso-2

### About me -

During my free time, I rather read some mystery and fiction books, and practise some sports such as football, volleyball and biking for fun. I like to spend time with my family and friends. At work, I like to exchange information and opinions about either labour or general issues with my coworkers. I have flexible working hours.

#### Skills —

Spanish (mother tongue)

English (B2)
French (A2)



2021-2024 PhD

During my PhD, I have developed and/or improved some skills such as teamwork, Fortran 90,C++ and Python programming as language, handling GIT-HUB repositories, and Unix system. I have delivered a certain amount of speeches both international and national. I have written papers which they have been very useful when writing in Latex code (scientific writing program).

- Superfluid <sup>4</sup>He<sub>N</sub> nanodroplets
- Helium Time Dependent Density Functional Theory (<sup>4</sup>He TD-DFT)
- Clusterization of foreign atoms within <sup>4</sup>He nanodroplets.
- · Quantum Vortices
- Coalescence of <sup>4</sup>He<sub>N</sub> nanodroplets
- Coulomb explosion of  $\mathsf{Ak}_2$  on  ${}^4\mathsf{He}_N$  nanodroplets

**2015–2020** 

Bachelor in physics. Havana University, Physics Faculty. Thesis entitle: Study of the Vibrational Predissociation of the NeBr $_2$  Complex by Computational Simulation Using the Trajectory Surface Hopping Method.

- · Van der Waals complexes
- Quasiclassic Method
- Trayectory Surface Hopping (TSH)
- C++ language (I built my own package for calculating TSH)
- · Wolfram Mathematics

## **Exp**erience

Participation in national/international Conferences (Poster and Lectures)

https://github.com/ErnestoGarciaALfonso/ Experience/blob/main/Professional\_experience.pdf







## **★** Membership

2023 Confined Molecular Systems: From a new Generation of Materials to the Starts (COSY) Work Group 4

2023 European Cooperation in Science & Technology (e-COST)



[07/2019–10/2019] Participation. Project "Theoretical study of helium nanodroplets dynamics: alkali dopants and quantum Vortex; rare gas dopants and cluster formation" in Toulouse, France. Participants: Nadine Halberstad, Manuel Barranco and Martí Pi from University of Barcelona.