## David Leonardo Ramos Salamanca

### **Education**

2020 – present M.S in Physics

Universidad Industrial de Santander, Colombia

Thesis: Study of magnetic skyrmions in square lattice antiferromagnets

Advisor: Pierre Pujol

2014 – 2019 **B.S in Physics** 

Universidad Industrial de Santander, Colombia Thesis: *Physical acceptability of compact objects* 

Advisor: Luis A. Núñez

## **Research Experience**

2022-02 – 2022-05 **Research intern** 

Université Paul Sabatier - Laboratoire de Physique Théorique, France

Duties performed: implemented optimizations to parallel tempering Monte Carlo

code for the simulation of classical spin models with phase transitions

Supervisor: Pierre Pujol

2021-08 – 2021-10 **Research intern** 

Latin American Alliance for Capacity Building in Advanced Physics (Online) Duties performed: implemented simulated annealing optimization for the solution

of non-linear boundary value problems

Supervisor: Pierre Pujol

# **Conference participation**

2022 12th International Conference on Magnetic and Superconducting Materials

University of Duisburg-Essen, Germany

Oral presentation: Stability of antiferromagnetic skyrmions

2020 **22nd Chilean Symposium of Physics** 

Universidad Tecnológica Metropolitana, Chile (Online)

Poster presentation: Physical acceptability of neutron stars with realistic equations of state

2019 6th Colombian Congress of Astronomy and Astrophysics

Universidad de Antioquia, Colombia

Poster presentation: Stellar structure and stability of compact objects with numerical equations

of state

#### **Awards**

2020 Outstanding bachelor's thesis distinction

Universidad Industrial de Santander, Colombia

#### References

Pierre Pujol Professor at Université Paul Sabatier pierre.pujol@irsamc.ups-tlse.fr

Luis A. Núñez Professor at Universidad Industrial de Santander lnunez@uis.edu.co