# Miguel Sabogal García

Mail: msabogal@est.uniatlantico.edu.co Telephone: + 57 3017958948

Contact page: Linkedin/msabogal

# **Experience**

05-08/2022 **Research intern,** RECA Internship program 2022, Red de Est. de Astronomía de Col.

03-00/2022 **Nesearch interni,** NECA internship program 2022, Neu de Est. de Astronomia de Col.

2019–2022 **Student representative,** Research Group for Elementary Particles and Cosmology.

2018 – 2019 **Mentor**, Pgm. Hermano mayor de extensión extracurricular por Pgm. de Física, UA.

05-06/2022 **Supportive Mentor**, Pgm. de Apoyo a la Permanencia y Graduación estudiantil, UA

# **Education**

• 2015 – 2022 **Physicist,** Bachelor's degree/ *Universidad del Atlántico*.

# **Research Experience and Publications**

#### **Peer-Reviewed Publications**

- Oliveros, A., Sabogal, M.A., & Acero, M.A. Barrow holographic dark energy with Granda-Oliveros cutoff. Eur. Phys. J. Plus 137, 783 (2022). <u>DOI:</u> 10.1140/epjp/s13360-022-02994-z
- Sabogal, M. A., Parra, I. C., Bandera, M., Gallardo, J., & Mejía-Cortés, C. (2020, May). Mobility of localized beams in non-homogeneous photonic lattices. In Journal of Physics: Conference Series (Vol. 1547, No. 1, p. 012023). IOP Publishing. <u>DOI:</u> 10.1088/1742-6596/1547/1/012023

## In Preparation

• **Sabogal, M. A.**, & Cardona, W. (2022). Implications of Holographic Dark Energy in the structure formation and observational constraints.

#### **Honors and Awards**

- Funding award "Enabling Science Program 2021 Award 51", granted by the Legacy Survey of Space and Time (LSST) observatory.
- **Undergraduate Honors Theses**, Universidad del Atlántico.

### **Presentations and Events**

Event: CoCo 2021: Cosmology in Colombia

**Type of event:** *National Congress* **Type of participation:** *Speaker* 

Conference title: Cosmological analysis of Barrow holographic dark energy model considering

the Granda-Oliveros infrared cutoff.

Place: Online, 08/09/2021 - 11/09/2021.

Event: 4th Colombian Meeting on High Energy Physics

Type of event: National Congress

**Type of participation:** Support staff and Assistant

Place: BARRANQUILLA - Universidad del Atlántico, 02/12/2019 - 06/12/2019.

Event: XVI National Meeting on Optics and VII Andean and Caribbean Conference on Optics

and its applications

Type of event: National Congress

Type of participation: Speaker

Conference title: Mobility of localized beams in non-homogeneous photonic lattices.

Place: MONTERÍA - Universidad de Córdoba, 26/11/2019 - 30/11/2019.

# Languages

English Speak: fluent Read: fluent Write: good Nivel: B2

#### **Additional Skills**

Specialized software Cosmic Linear Anisotropy Solving System (CLASS): Advanced

Specialized software Gaussian processes (GaPP): Advanced

Python: Advanced

C/C++: Intermediate

Fortran 90: Intermediate

MATLAB: Advanced

Mathematica: Advanced

# Web repositories

GitHub: msabogal