

Felipe L. Gómez-Cortés

Curriculum Vitae

Education

2013–2014 **M.Sc. Physics**, *Universidad de Los Andes*, Bogotá, Colombia..
Postponed

2013 **B.Sc. Physics**, *Universidad Nacional de Colombia*, Bogotá, Colombia..
[Masters Thesis \(In Progress\)](#)

Title *A Conection Between Star Formation Rate and Dark Matter Halos at $z \sim 6$.*

Supervisor Professor Jaime Forero-Romero

Description This work relates ordinary matter and dark matter in the early Universe using telescope observations and halo catalogs from simulations using a MCMC method.

Keywords Large Scale Structure, Galaxy Evolution, Computational Astrophysics.

[Bachelor Thesis](#)

Title Mass Characterization of the H_3^+ and H^- Ion Beam From a Plasmatron Ion Source.
2012

Director Professor Gustavo Martínez Tamayo

Description This work studied how the change of the geometry of the thermionic emission filament in the UNAC-Plasmatron (ion source) generates a change in the ion production and the ion beam.

Keyords Plasma, Ion Beam, H^- Ion, Experimental Physics.

[Other](#)

2016 **The Analytical Edge**, MIT online course. Actyally enrolled.
<https://www.edx.org/course/analytics-edge-mitx-15-071x-2>

January 2016 **PADI Scuba Diver**, Reef Shepherd Professional Dive Center, Santa Marta, Colombia.

2015-I Internship at **Purdue University, Indiana, USA**. Colciencias scholarship holder.

July 2014 **nIFTy Cosmology: Numerical Simulations for Large Surveys** Universidad Autónoma de Madrid, Madrid, España.
<http://popia.ft.uam.es/nIFTyCosmology/Home.html>

January 2014 **Cosmology on the Beach: Essential Cosmology for the Next Generation**. Berkeley Center for Cosmological Physics and Advanced Institute for Cosmology (México). Cabo San Lucas, México.
http://bccp.berkeley.edu/beach_program/index2014.html

June 2013 **Workshop Astronomía en Los Andes**, Uniandes, Bogotá, Colombia

Calle 23C 70-50 Int 21 Apt 403 – Bogotá, Colombia.

☎ (+57) 316 845 5161 • ☎ (+571) 759 5221

✉ fgomezc87@gmail.com • 🌐 <https://github.com/fgomezc>

- 2012 **Circuits and Electronics 6.002x**. Online course of the MIT.
<http://6002x.mitx.mit.edu/info>
- October 2010 **Workshop on Physics and Thechnology at CERN**, UNAL, Bogotá, Colombia
- August-2010 **Escuela de Astronomía Extragaláctica** Observatorio Astronómico Nacional, Bogotá , Colombia.
- October 2009 **XXIII Congreso Nacional de Física, Universidad del Magdalena**, Santa Marta, Colombia.
www.sociedadcolombianadefisica.org.co/pag/eventos2009.php
- 2008 **Short Tale Workshop“Ciudad de Bogotá 2008.”** Fellow of the Capital District in the workshop adjoint to RENATA (Red Nacional de Talleres de Escritura Creativa)

Experience

Vocational

- 2015-2 **Graduate Assistant**, UNIVERSIDAD DE LOS ANDES, Bogotá, Colombia.
 Teacher of **Herramientas Computacionales (Computation Tools)** for Physics and Science. Dedication: 8 hours per week.
[Website, videos, resources and excercises.](#)
 Syllabus:
 - Basics of UNIX systems.
 - Introducing the Python programming language.
 - Algorythms
 - Solving Physical Systems
- 2015-2 **Graduate Assistant**, UNIVERSIDAD DE LOS ANDES, Bogotá, Colombia.
 Teacher Assistant of **Métodos Computacionales (Computation Methods)** for Physics and Science using Python and C. Dedication: 4 hours per week.
- 2013-II **Graduate Assistant**, UNIVERSIDAD DE LOS ANDES, Bogotá, Colombia.
- 2014-II Teacher of **Experimental Physics I & II** and **Physics II (Complementary Section)** for Science and Engineering.
- 2013-I **Academic Teacher**, BATAKLÁN CORPORACIÓN DE ARTES, Bogotá, Colombia.
 Teacher of **Art and Science** for elemmentary and high school.
- 2013-I **Academic Teacher**, FUNDACIÓN SAN JOSÉ, Bogotá, Colombia.
 Teacher of **Mathemathics and Statistics** for Bussiness Managment and Engineering.

Miscellaneous

- 2009–2010 **Astronomy Auxiliar Student**, UNIVERSIDAD NACIONAL DE COLOMBIA, Bogotá, Colombia..
 Course “Astronomía Para Todos” (Astronomy for Everybody) at the National Obervatory.

Awards

- 2011-II **Mejor Saber-Pro 2011-2 en Física**. ICFES.
 Top National Physics Bachelor Student. The list is available at www.icfes.gov.co

Calle 23C 70-50 Int 21 Apt 403 – Bogotá, Colombia.

☎ (+57) 316 845 5161 • ☎ (+571) 759 5221
 ✉ flgomezc87@gmail.com • 🌐 <https://github.com/flgomezc>

Publications

- 2013 **Experiments with Polygonal and Polyhedral Resistive Structures.** *R. Beltrán, F. Gómez, R Franco, J-Alexis Rodríguez and F. Fajardo*, Latin American Journal of Physics Education Vol 7, Issue 4, Dec 2013, 621-624
www.lajpe.org/index_dec2013.html
- 2010 **Cenizas en el Andén. Antología de Cuento Urbano.** City Short Tales Antology, story title: **Imagínate** as Filipo Rviz. ISBN 978-958-44-4585-8.
https://es.wikipedia.org/wiki/Cenizas_en_el_and%C3%A9n

Computer skills

Basic R
Intermediate C++, JAVA, L^AT_EX, OpenOffice, Linux, Microsoft Windows
Advanced PYTHON

Languages

Spanish **Native Speaker**
English **B2 Level** *Common European Framework of Reference. BULATS Test. 2011.*

Interests

- Reading
- Swimming
- Guitar
- Writting
- Diving
- Riding Bike

Calle 23C 70-50 Int 21 Apt 403 – Bogotá, Colombia.

☎ (+57) 316 845 5161 • ☎ (+571) 759 5221

✉ flgomezc87@gmail.com • 🌐 <https://github.com/flgomezc>