

M.S. Jairo Alzate

Curriculum Vitae

✉ j.alzate@irya.unam.mx
December 2019

Education

- 2015–today **PhD in Astrophysics**, *Universidad Nacional Autónoma de México*, Morelia.
Galactic Astronomy
Thesis *Stellar population parameters of the Milky Way*
Tutor PhD Gustavo Bruzual
- 2012–2015 **Master in Astrophysics**, *Universidad Nacional Autónoma de México*, Morelia.
Galactic Astronomy
Tesis *Detection of satellite galaxies of the Milky Way with Gaia photometry*
Tutor PhD Gustavo Bruzual
- 2005–2011 **Undergraduate in Physics**, *Universidad del Valle*, Colombia.
Cosmology

Schools, workshops and conferences attended

- 2018 **International school**, *Paris*, France, 26 February - 2 March.
Scientific Exploitation of the Gaia Data
- 2017 **IAU Symposium**, *Postdam*, Germany, 10 - 14 July.
Rediscovering our Galaxy
- 2017 **International meeting**, *Morelia*, México, 3 - 7 April.
Multi-scale Star Formation
- 2016 **Summer School**, *Heidelberg*, Germany, 12 - 16 September.
Astrostatistics & Data Mining School
- 2016 **Regional meeting**, *Cartagena*, Colombia, 3 - 7 October.
Latin American Regional IAU Meeting
- 2016 **Summer School**, *León*, México, 17 - 21 April.
Mexican Astro Cosmo Statistics School
- 2015 **Workshop**, *Barcelona*, España, 31 Agosto al 4 Septiembre.

Gaia Challenge III

- 2014 **International meeting**, *Barcelona*, España, 1 al 5 diciembre.
The Milky Way Unravelling by Gaia
- 2013 **School**, *Ciudad de México*, México, 3 - 12 November.
Galactic Dynamics in the times of GAIA and other great surveys
- 2013 **National meeting of physics**, *San Luis Potosí*, México.
Universidad Autónoma de San Luis Potosí
- 2009 **National meeting of physics**, *Santa Marta*, Colombia.
Universidad del Magdalena

Grants and distinctions awarded

- 2012 – 2014 **Master research fellowship**, *Consejo Nacional de Ciencia y Tecnología*, México.
2015 – today **Doctoral research fellowship**, *Consejo Nacional de Ciencia y Tecnología*, México.

Computer skills

- Basic FORTRAN, *Stan*, Machine Learning
Intermediate Python, TOPCAT, ADQL
Advanced

Languages

- Spanish Native
English Reading (good) - writing (Intermediate) - Speaking (Intermediate)

Research projects

- 2015 – today **Rediscovering our Galaxy: scientific exploitation of Gaia**, *Led by Luis Aguilar and Gustavo Bruzual*, México.

Interests

- Stellar populations
Milky Way and Galaxy models
Statistical astronomy
Bayesian inference
Data Mining
Machine learning

Scientific Publications

- Star formation history of the solar neighbourhood as told by Gaia**, *Alzate Trujillo, J.; Bruzual, Gustavo, D. Diaz-Gonzalez*, 2021, MNRAS 501,302.