

# CURRICULUM VITAE

Name: **Orlando Andrés Baquero Larriva**

Birth place: April 15th of 1986. Cuenca – Ecuador

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## EXPERIENCE

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Bachelor's at Computer Systems Engineer from Universidad de Cuenca (2009), master at Physics from Escuela Politecnica Nacional (2014). Currently PhD candidate for Astrophysics PhD program in Universidad Complutense of Madrid. Academic in Universidad del Azuay, since 2014 until now.

## LATEST ADVISORS

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- José Luis Contreras Gonzalez - [jlcontreras@fis.ucm.es](mailto:jlcontreras@fis.ucm.es)
- Nicolás Vásquez - [nicolas.vasquez@epn.edu.ec](mailto:nicolas.vasquez@epn.edu.ec)

## LANGUAGES

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- Spanish: tongue language
- English: written(medium), fluency(medium), reading(high)

## EXPERIMENTAL TECHNIQUES AND SOFTWARE SKILLS

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- Programming with C, C++, TCL, Perl, Python, root, MatLab, Java, Visual Basic, .NET, PHP, Wolfram Mathematica, jupyter notebook.
- Data base management, MySQL, Microsoft SQL, ORACLE, Sybase.
- Data analysis software, Heasoft, Xanadu, Ftools, Fitsio, Fv, Xstar, QDP/PLT, Gnuplot, lstchain, gammapy, pyirf

## RESEARCH EXPERIENCE AND PROFESSIONAL FORMATION

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**PhD candidate:** Universidad Complutense de Madrid. Astrophysics PhD program. September 2018 until now.

**Teacher and Researcher:** Since Sep. 2014 in the Universidad del Azuay until now.  
Cuenca, Ecuador.

**MSc in Physics.** January 2012 to December 2014, Escuela Politécnica Nacional, Quito Ecuador. **Thesis:** “Classification of Long Gamma-ray Bursts using spectral lag and ACF with cosmological corrections”. **Advisor:** Nicolás Vásquez.

**Bachelor in Computer Systems Engineer.** September 2003 to December 2009,  
Universidad de Cuenca, Cuenca, Ecuador.

## MEETINGS, CONGRESS AND WORKSHOP

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- Contribution to the ADASS 2020 LSTOSA: Onsite processing pipeline for the CTA Larged-Sized Telescope prototype
- Contribution to the XIV.0 Scientific Meeting (virtual) of the Spanish Astronomical Society. “Onsite Analysis for the Large Size Telescope prototype of CTA”.
- Contribution to ICRC 2019. “Monte Carlo Studies of Combined MAGIC and LST1 Observations”.
- Oral contribution: 64<sup>th</sup> International NASE-IAU Astronomy Course. “Stars Evolution”. 25-27 March 2015.
- 8<sup>th</sup> CERN Latin American School of High-Energy Physics. 5 - 17 March 2015, Ibarra, Ecuador.
- Poster presentation and oral contribution: 13<sup>th</sup> Encounter of Physics. Escuela Politécnica Nacional. “Intrinsic properties of long GRBs” 11-15 November 2013.

## WORK PUBLISHED

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- “MAGIC Observations of the Nearby Short Gamma-Ray Burst GRB 160821B”. The Astrophysical Journal. Volume 908, Num 1, 2021-02-16.
- “Sensitivity of the Cherenkov Telescope Array for probing cosmology and fundamental physics with gamma-ray propagation”, JCAP01. Volume 57. 2021-01-27.
- “Detection of the Geminga pulsar with MAGIC hints at a power-law tail emission beyond 15 GeV”. Astronomy and Astrophysics. Volume 643, L14, P6. 2020-11-20
- Studying the nature of the unidentified gamma-ray source HESS J1841-055 with the MAGIC telescopes”, Monthly Notices of the Royal Astronomical Society, Volume 497, Issue 3, pp.3734-3745, 2020-07-24.
- “Monte Carlo studies of combined MAGIC and LST1 observations”. 36th International Cosmic Ray Conference (ICRC2019). Volume 36, P-659. 07-2019.
- “Las explosiones de rayos gamma un campo abierto para la astrofísica”, Revista de la Facultad de Ciencias Químicas, Num.18, 2017-10-01.
- Baquero Larriva, A. “Recent Advances in the classification of short gamma-ray bursts in astrophysics”. Maskana. Vol 7. No. 2, pp. 139-146. 12/2016.
- Alejandro Vasquez, Nicolas; Baquero, Andres; Andrade, David. “Alternative temporal classification of long Gamma Ray Bursts”. IAU General Assembly, Meeting #29, id.2250495. 08/2015. Andrés Baquero; Nicolás Vásquez. “Temporal-spectral study of GRB 061007”. Revista Politécnica. Vol. 32. No.2. 06/2013.