

Diego Calderón

PERSONAL DETAILS

Birth March 27th, 1991 – Chile
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EDUCATION

Doctoral studies in Astrophysics 2015-present
Pontificia Universidad Católica de Chile - Santiago, Chile
Thesis: “The role of interacting stellar winds feeding Sgr A*” advised by Prof. Jorge Cuadra.

Master in Astrophysics 2013-2015
Pontificia Universidad Católica de Chile - Santiago, Chile
Thesis: “Thin-shell instabilities and clump formation due to colliding stellar winds in the Galactic Centre” advised by Prof. Jorge Cuadra.

Bachelor in Astronomy 2009-2012
Universidad de Concepción - Concepción, Chile
Ranked 1 out of 35 enrolled in 2009 at the Astronomy program.

Elementary, middle- and high-school 1998-2008
Liceo Alemán del Verbo Divino - Los Ángeles, Chile.

FELLOWSHIPS AND AWARDS

2015-2018 CONICYT fellowship for doctoral studies
Jun 2014 SOCHIAS International meeting attendance funding
2013-2014 CONICYT fellowship for master studies
2009-2012 CATA scholarship for undergraduate studies
Apr 2015 Doctoral excellence award, *Pontificia Universidad Católica de Chile*
Dec 2008 Best student class 2008, *Liceo Alemán del Verbo Divino*
Dec 2006 Bronze medal national mathematics olympics - Santiago, Chile

SKILLS

Languages English (fluent), Spanish (mother tongue) & Japanese (basic)
Operating systems MAC OS X, UNIX, Linux & Windows
Programming C, FORTRAN, PYTHON & Shell scripts
Software IRAF & L^AT_EX

OBSERVATIONAL EXPERIENCE

Feb 2013 CTIO SMARTS 0.9m telescope, two nights.

CONFERENCE TALKS

Clump formation through colliding stellar winds in the Galactic Centre

XIII Chilean astronomy society annual meeting - March 2016

Antofagasta, Chile.

Clump formation through colliding stellar winds in the Galactic Centre

"Dynamics and accretion at the Galactic Center conference", February 2016

Aspen - Colorado, USA.

Formation of the infalling Galactic Centre cloud G2 by collision of stellar winds

"XII Chilean astronomy society annual meeting" - March 2015

Puerto Varas, Chile.

Formation of the infalling Galactic Centre cloud G2 by collision of stellar winds

"European week of astronomy and space sciences" - July 2014

Special session: "Tidal disruption events around Sgr A and beyond"*

Geneva, Switzerland.

CONFERENCE POSTER PRESENTATIONS

Formation of the infalling Galactic Centre cloud G2 by collision of stellar winds

"International workshop on Wolf-Rayet stars" - July 2015

Potsdam, Germany

Constraining the molecular outflows: Hyper-Luminous Infrared Galaxies

"Unveiling the AGN-Galaxy evolution connection" - March 2015

Puerto Varas, Chile

Formation of the infalling Galactic Centre cloud G2 by collision of stellar winds

"European week of astronomy and space sciences" - July 2014

Special session: "Fast outflows in massive stars: from single objects to wind-fed and colliding-wind binaries"

Geneva, Switzerland.

Analysis of the velocity data of cluster A562

"American astronomical society meeting 223rd" - January 2014

Baltimore - Maryland, USA

Analysis of the velocity data of cluster A562

"XIV Latin american regional IAU meeting (LARIM)" - November 2013

Florianopolis, Brazil

ASTROPHYSICS SCHOOLS

- 2016 “Scientific writing for young astronomers” - Puerto Varas, Chile
2014 “Galaxies: near and far, young and old” - Vatican Observatory, Italy
2013 “REU/PIA program at CTIO” - La Serena, Chile

TEACHING EXPERIENCE

- 2015-1 ”Introduction to Astronomy” teaching assistant with Prof. Puzia.
2015-1 ”Introduction to Physics” teaching assistant with Prof. Michea.
2013-2014 Chemistry and physics teacher at “Pre-universitario FEUC”.
2011-2012 Outreach observatory teaching assistant, U. de Concepción.
2012-1 “General astrophysics” teaching assistant with Prof. Mennickent.
2011-2 “Electromagnetic theory” teaching assistant with Prof. Ovalle.

REFEREED PUBLICATIONS

Searching for molecular outflows in hyper-luminous infrared galaxies

Calderón D., Bauer F. E., Veilleux S., Graciá-Carpio J., Sturm E., Lira P., Schulze S., Kim S., 2016, MNRAS (accepted for publication)

Clump formation through colliding stellar winds in the Galactic Centre

Calderón D., Ballone A., Cuadra J., Schartmann M., Burkert A., Gillessen S., 2016, MNRAS, 455, 4388

OTHER PUBLICATIONS

Formation of the infalling Galactic Centre cloud G2 by collision of stellar winds

Calderón D., Ballone A., Cuadra J., Schartmann M., Burkert A., Gillessen S., 2016, Proceedings of the International Workshop on Wolf-Rayet Stars, Universitätsverlag Potsdam

Stellar Variability in the VVV survey

Catelan M et al., 2013, arXiv:1310.1996 (including Calderón Espinoza D. N.)

GRB 130131B: CTIO 0.9-m optical upper-limits

Calderon Espinoza D., Indahl B., Paredes Alvarez L., Kaleida C., Virgili F. J., 2013, GRB Coordinates Network, 14202, 1

REFERENCES

Professor Franz E. Bauer - fbauer@astro.puc.cl

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Professor Jorge Cuadra - jcuadra@astro.puc.cl

Instituto de Astrofísica, Pontificia Universidad Católica de Chile