

# Carolina Agurto Gangas

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## Education

**Ludwig-Maximilians-Universität München**

*Dr. rer. nat. in Astronomy*

**Munich, DE**

*Expected Graduation: September 2019*

**Universidad de Valparaíso**

*MSc. in Astrophysics*

**Valparaíso, CL**

*Graduation: May 2015*

**Universidad de Valparaíso**

*Licentiate in Physics with specialization in Astronomy, BSc degree*

**Valparaíso, CL**

*Graduation: December 2012*

## Observation Experience

**NORthern Extended Millimeter Array (NOEMA)**

*Project S16AT Grain growth in a Class I protoplanetary disk.*

PI: C. Agurto-Gangas. Total time: 7.9h

**IRAM, Grenoble, FR**

*29-01 Jun/Feb 2017*

**Submillimeter Array (SMA)**

*MASSES Observing program 2014A-S093*

**Mauna Kea, HI**

*2-6 Jun 2016*

**Paranal Observatory**

*Observing program on FORS*

**Antofagasta, CL**

*2-4 Jun 2015*

- Period measurements of WDMS binaries on CVs period gap

**Observatorio Santa Martina UC**

*Be stars spectra campaign*

**Santiago, CL**

*23-27 Feb 2015*

- Spectra for 40 Be stars using Pucheros, a high resolution Echelle spectrograph (R = 17000) mounted ESO telescope at 50cm.

**La Silla Observatory**

*Observing program on NTT-EFOSC2*

**La Serena, CL**

*23-30 Nov 2012*

- Spectral study of binary systems (K-F-G dwarf) plus white dwarf star, radial velocity and period calculation.

**Cruz del Sur Observatory**

*Variable stars observation (CCDOps software)*

**Combarbalá, CL**

*25-30 Jan 2011*

## Publications and Proceedings

**Revealing the dust grain size in the inner envelope of the Class I protostar Per-emb-50**

2019

Accepted for publication in A&A

Agurto-Gangas, C.; Pineda, J. E.; Szucs, L.; Testi, Tazzari, M., Miotello, A.; Caselli, P.; Dunham, M.; Stephens, I. W.; Bourke, T.

**Grain growth in Class I protostar Per-emb-50: a dust continuum analysis ...**

2017

Proceeding, Memorie della Societa Astronomica Italiana, v.88, p.761.

Agurto-Gangas, C.; Pineda, J. E.; Testi, L.; Caselli, P.; Szucs, L.; Tazzari, M.; Dunham, M.; Stephens, I. W.; Miotello, A.

**Determination of Pulsation Periods and Other Parameters of 2875 Stars ...**

2016

ApJ Supplement Series, Volume 227, Issue 1, article id. 6, 13 pp.

Vogt, N.; Contreras-Quijada, A.; Fuentes-Morales, I.; Vogt-Geisse, S.; Arcos, C.; Abarca, C.;

Agurto-Gangas, C.; Caviedes, M.; DaSilva, H.; Flores, J.; Gotta, V.; Peñaloza, F.; Rojas, K.; Villaseñor, J. I.

**Young stellar clusters in the VVV Survey containing massive YSOs**

2016

ApJ, Volume 152, Issue 3, article id. 74, 23 pp.

Borissova, J.; Ramírez Alegria, S.; Alonso, J.; Lucas, P. W.; Kurtev, R.; Medina, N.; Navarro, C.; Kuhn, M.; Gromadzki, M.; Retamales, G.; Fernandez, M. A.; [Agurto-Gangas, C.](#); Chené, A. N.; Minniti, D.; Contreras Pena, C.; Catelan, M.; Decany, I.; Thompson, M. A.; Morales, E. F. E.; Amigo, P.

**Detached cataclysmic variables are crossing the orbital period gap** 2016

MNRAS, Volume 457, Issue 4, p.3867-3877.

Zorotovic, M.; Schreiber, M. R.; Parsons, S. G.; Gänsicke, B. T.; Hardy, A.; [Agurto-Gangas, C.](#); Nebot Gómez-Morán, A.; Rebassa-Mansergas, A.; Schwöpe, A. D.

**VVV Galactic Star Clusters: VVV CL059** 2015

Proceeding VI Reunión sobre Astronomía Dinámica en Latinoamérica (ADeLA 2014), RevMexAA.

[Agurto Gangas, C.](#); Borissova, J.; Ramírez Alegria, S.; Kurtev, R.; VVV star cluster Team

**Fourteen new eclipsing SDSS white dwarf plus main-sequence binaries ...** 2015

MNRAS, Volume 449, Issue 2, p.2194-2204.

Parsons, S. G.; [Agurto-Gangas, C.](#); Gänsicke, B. T.; Rebassa-Mansergas, A.; Schreiber, M. R.; Marsh, T. R.; Dhillon, V. S.; Littlefair, S. P.; Drake, A. J.; Bours, M. C. P.; Breedt, E.; Copperwheat, C. M.; Hardy, L. K.; Buisset, C.; Prasit, P.; Ren, J. J.

**White dwarf-main sequence binaries from SDSS DR8: unveiling the cool ...** 2013

MNRAS, Volume 433, Issue 4, p.3398-3410.

Rebassa-Mansergas, A.; [Agurto-Gangas, C.](#); Schreiber, M. R.; Gänsicke, B. T.; Koester, D.

## Conferences/Schools/Workshop

**Talk: Radiative transfer modelling for the Per-emb-50 protostellar disk** 5-7 Dec 2018

Center for Astrochemical studies (CAS) Retreat. Ringberg, Germany

**Talk: Revealing the dust grain size in the inner envelope of the Class I protostar Per-emb-50** 7-12 Oct 2018

Second Binational Meeting AAA-SOCHIAS. La Serena, Chile

**II International Astrochemistry School** 1-5 Oct 2018

Universidad Autónoma de Chile. Santiago, Chile

**Talk: Revealing the dust grain size in the inner envelope of the Class I protostar Per-emb-50** 12 Sep 2018

MPE Science Day 2018. Garching, Germany

**Poster: Revealing the dust grain sizes in the envelope of Per-emb-50** 11-15 Jun 2018

Cosmic Dust: origin, applications and implications. Copenhagen, Denmark

**Talk: Evidence of grain growth in Class I protostar: Per-emb-50** 28-30 Jun 2017

Center for Astrochemical studies (CAS) Retreat. Ringberg, Germany

**Talk: Grain growth in Class I Protostars** 29 May- 23 Jun 2017

MIAPP PROGRAMME: PROTOPLANETARY DISKS AND PLANET FORMATION AND EVOLUTION. Garching, Germany

**Poster: Grain growth in Class I protostar Per-emb-50: A dust continuum analysis with NOEMA & SMA** 5-9 Jun 2017

Francesco's legacy: star formation in space and time. Florence, Italy.

**9th IRAM millimeter interferometry School** 10-14 Oct 2016

Institut de Radioastronomie Millimétrique IRAM, Grenoble, France

**Talk: Grain growth in Class I Protostars** 5-6 Oct 2016

2nd IMPRS Symposium. MPE, Garching, Germany

**Talk: Combining the Catalina light curve catalogue and SDSS to identify new eclipsing PCEBs**

**Poster: Young stellar clusters in the VVV Survey containing massive YSOs** 12-15 Mar 2015

XII annual meeting of the Chilean Astronomical Society (SOCHIAS). Puerto Varas, Chile

**First VLT School in Chile**

3-7 Nov 2014

Universidad de Valparaíso, Chile

**Poster: VVV Galactic Star Clusters: VVV CL059**

Aug 29 - Oct 3 2014

VI Reunión sobre Astronomía Dinámica en Latinoamérica (ADeLA 2014). Santiago, Chile

**Poster: VISTA Variables in The Via Lactea Galactic Star Clusters: VVV CL059**

7-8 Aug 2014

First Workshop of Millenium Institute of Astrophysics. Los Andes, Chile

**MAD Planet Formation Summer School**

20-22 Mar 2013

Cerro Calán, Santiago, Chile

**Talk: White dwarf-M dwarf binaries from Sloan Digital Sky Survey**

22-26 Oct 2012

I National Meeting of Physics and Astronomy Students. Valparaíso, Chile

**Talk: White dwarf-M dwarf binaries from Sloan Digital Sky Survey**

10-12 Oct 2012

IX annual meeting of the Chilean Astronomical Society (SOCHIAS). Viña del Mar, Chile

**Poster: White dwarf-M dwarf binaries from Sloan Digital Sky Survey**

3-7 Oct 2011

First Bi-national Meeting AAA-SOCHIAS. San Juan, Argentina.

## Awards/Grants

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**Award 100 Young Chilean Leaders**

Dec 2018

*Selected as one of the 100 leaders under 35 by El Mercurio newspaper and Universidad Adolfo Ibáñez*

**Scholarship for Doctorate programs abroad**

2015-present

*Becas Chile, CONICYT Nr. 5594/2015*

**Grants for the Astronomy Graduate Program of the Universidad de Valparaíso**

2014

*Gemini-CONICYT Project Nr. 32110004*

**Grants for the Master Astronomy Program at Universidad de Valparaíso**

2013

*ALMA-CONICYT Project Nr. 31120015*

## Teaching experience

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Universidad de Valparaíso:

**B.S. in Mathematics Course**

*First semester, Assistant professor in Physic I*

2012

**B.S. in Astrophysics Course**

*First semester, Assistant professor in Laboratory, Electromagnetism, Waves and Optics*

2012

**B.S. in Astrophysics Course**

*First semester, Assistant professor in Physic I y Physic II*

2011

## Programing skills

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- **Programming Languages** Python, Fortran, Bash, Supermongo
- **Astronomical Softwares** RADMC-3D, CASA, MIRIAD, Class, Ds9, IDL, IRAF, Topcat, VOSpec
- Native Spanish. Fluent English. A2 German

## Outreach Activities

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**Star Tres Project**

*Science Communicator*

[www.startres.net](http://www.startres.net)

2013-present

**National outreach programme and assessment of science and technology**

*Scientific Assistant. EXPLORA*

*2013-present*

**Universidad de Valparaiso**

*Member, Communication and Outreach Center*

*2012*

**Exhibition: The Max Planck Science Tunnel in Valparaiso**

*Expositor*

*2009*

**School Talks, Outreach Activities in Universidad de Valparaíso**

*Talk: Stellar evolution*

*2008-2015*