

Curriculum Vitæ Gaspar Galaz
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1. Address

Departamento de Astronomía y Astrofísica (DAA)
Pontificia Universidad Católica de Chile (PUC)
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2. Education

- Ph.D. (Astrophysics), Université de Paris VII, December 1997.
- M.Sc. (Astronomy), Universidad de Chile, August 1993.
- B.Sc. (Physics), Universidad de Chile, December 1990.

3. Employment History

- Associate Professor, PUC (January 2006+).
- Assistant Professor, PUC (January 2001 – December 2005).
- Andes-Carnegie Postdoctoral Fellow (January 1998 – December 2000).

4. Appointments

- Visiting Associate Professor, Department of Astronomy, University of Maryland, College Park, USA (September to December 2010).
- Visiting Research Scholar, Department of Astronomy, University of Washington, Seattle USA (May to August 2010).

5. Primary Research Interests

Extragalactic astronomy. Stellar and gaseous content in galaxies. Low surface brightness galaxies. Optical and near-IR extragalactic astronomy. Statistical properties of the galaxy distribution. Galaxy evolution. Large scale structure of the universe.

6. Research and Other Grants

- co-I Anillo Atlas Andino (PI: Marco Díaz, Departamento de Física, PUC, 2012+).
- PI, FONDECYT REGULAR GRANT 1120195 (2012 - 2015), *Unveiling the Physical Properties of the Interstellar Medium in Low Surface Brightness Galaxies*. ~US\$ 190,000.
- PI, GEMINI-CONICYT Grant 32110010, 2011-2013, *Support for the Graduate Program in Astrophysics at Pontificia Universidad Católica de Chile*. ~US\$ 20,000.
- PI, ALMA-CONICYT Grant 31110008, 2012-2013, *Support for the Graduate Program in Astrophysics at Pontificia Universidad Católica de Chile*. ~US\$ 68,000.
- PI, GEMINI-CONICYT Grant 32090009, 2010, "Sabbatical leave", grant covering airfares, US\$ 2,000.

- PI, ALMA-CONICYT Grant 31090009, 2010, “Sabbatical Leave to the University of Washington: Adding the sub-mm Windows to the Local Volume Legacy Survey”, US\$ 6,000.
- PI, FONDECYT Regular Grant 1085267 (2008 – 2011), *The Impact of Environment on Stellar Formation in Low Surface Brightness Galaxies*. ~US\$120,000 (co-Is: Leonardo Bronfman and Nelson Padilla).
- Sponsor Investigator, FONDECYT Postdoctoral, Rodrigo Parra, 2008-2009.
- PI, FONDECYT Regular Grant 1040359 (2004 – 2008), *Improving our Understanding of Low Surface Brightness Galaxies*. ~US\$92,000.
- DIPUC starting grant 2001/14E (2001 – 2003), *Stellar Populations in Low Surface Brightness galaxies*. ~US\$7,000.
- Co-I, FONDAP grant 15010003 (2002 – 2012): *Center for Astrophysics*. ~US\$600,000 per year (shared with other ~20 researchers).
- ECOS-Conicyt grant (1999 – 2001): *A study of galaxy evolution up to $z=0.6$* . ~US\$20,000 (shared with Valérie de Lapparent).

7. Administration, committee work, refereeing

- Member, Faculty of Physics Dean Searching Committee (elected, 2013).
- Member of the GEMINI-CONICYT Time Allocation Committee (2012+).
- Member of the ALMA Assessor Panels (2011+).
- Head of the Graduate Program in Astronomy at the DAA, PUC (2011-2013).
- Head of the Undergraduate Program in Astronomy at the DAA, PUC (2007-2009).
- Department Representative to the Faculty Council (2009-2010).
- Member of the Physics and Astronomy Panel, FONDECYT (2008-Jan 2010).
- Head of the Outreach Committee, Faculty of Physics (2007-2010).
- Member of the Faculty Search Committee (2007 and 2008).
- Member of the ALMA-CONICYT Committee (2008- Jan 2010).
- Head of the Qualifying Exam Committee (2006-2007).
- Co-Chair, Local Organizing Committee of the 11th Latin American Regional IAU Meeting, held in Pucón, Chile, December 2005.
- Member of the Organizing Committee of the 2nd Chilean Advanced School of Astrophysics, “First Large Scale Structures in the Universe and their Evolution”, held in Santiago, Chile, December 2004.
- Executive Director (elected, January 2004-January 2006), Sociedad Chilena de Astronomía (SOCHIAS).
- Outreach Director, Astronomy and Astrophysics Department, PUC (2003 - 2007).
- Director, Outreach Committee, Faculty of Physics PUC (2006+).
- Referee Explora-Conicyt grants.
- Referee Fondecyt Regular and postdoctoral grants.
- Referee International Cooperation projects, Fondecyt.
- Referee, The Astrophysical Journal, The Astronomical Journal and Astronomy & Astrophysics.

8. Educational and Outreach Activities

- Conductor, “Cazadores de Ciencia”, science documentary with 13 chapters, transmitted by TVN (principal TV broadcasting in Chile), 2008.
- Editor, FONDAP Center for Astrophysics Outreach Book Series (2007).
- Lecturer for astronomy courses at Centro de Extensión, PUC (2006 and 2007).
- Scientific consulting and conductor “Cazadores de Ciencia”, documentary to be presented at TVN.

- Teaching of Physics and Astronomy courses for Astronomy, Physics, and Engineering students at the undergraduate and graduate level. Including *General Astrophysics*, *Mechanics*, *Cosmology*, *Cosmic Microwave Background Radiation*, and *Radiative Processes in Astrophysics* (at least 1 course/semester since 2002).
- Supervisor of 13 undergraduate students in Astronomy, PUC.
- Supervisor of 2 graduate student, PUC.
- Co-supervisor of 15 undergraduate students in Astronomy, PUC.
- Co-Supervisor of 5 Master theses in Astronomy, PUC.
- Talks at elementary and high schools and national amateur astronomy meetings.
- Mini-courses for the general public at PUC Outreach Center.
- Author of several articles to general public in main newspapers in Chile.
- Several interviews on astronomical subjects on nation-wide TV and radio.
- Scientific consulting and conductor of the Documentary “Deep Impact”, Cazadores de Ciencia Productions (Transmitted by TV Channel 13, 2005).
- Scientific consulting and conductor of the Documentary “100 años luz”, Cábala Productions (Transmitted by Canal 13 cable, 2004).
- Exposition “Old Astronomical Instruments in Chile”, Outreach Center, PUC (2004).
- Scientific Editor “Dossier de Astronomía”, Revista Universitaria, nº 83, PUC (2004).
- Organizer from the 1st to the 5th Andes-Carnegie Summer School in Astronomy for Undergraduates, Las Campanas Observatory (1997 – 2001).

9. Invited Seminars, visits

- Visiting Professor, University of Washington, Seattle (May-August 2010).
- Visiting Professor, University of Maryland at College Park (September-December 2010).
- Departamento de Física, Facultad de Ciencias Físicas y Matemáticas, Universidad de Chile (Santiago).
- Universidad Andrés Bello (Santiago).
- Rio de Janeiro Observatory (Rio de Janeiro).
- Carnegie Observatories (Pasadena).
- University of Florida (Gainesville).
- Princeton University (Princeton).
- Columbia University (New York).
- Universidad de Chile (Santiago).
- Centro de Estudios Científicos (CECS) (Valdivia).
- Pontificia Universidad Católica de Chile (Santiago).
- Universidad de Concepción (Concepción).
- Universidad Católica de Valparaíso (Valparaíso).

10. Edited Conference Proceedings

- D. Alloin, K. Olsen & G. Galaz (2000), editors, *Stars, gas and dust in galaxies: exploring the links*, vol. 221 of the Astronomical Society of the Pacific Conference Series.

11. Books

- Abell, P. and 238 co-authors 2009. “LSST Science Book v2.0”. (<http://www.lsst.org/lsst/scibook>). Chapter on Galaxies.

12. Professional Societies

- Member, Sociedad Chilena de Astronomía (SOCHIAS).
- Member, American Astronomical Society (AAS).

13. Observational Experience

- Since 1995 to present, more than 40 observing runs in telescopes, including 3.5m NTT, 8.2m VLT, 15m SEST (ESO); 2.5m du Pont (Carnegie), 1.0m Swope (Carnegie), 6.5m Magellan (Carnegie); 4m Blanco, 1.5m CTIO; 8.2m Gemini (NOAO); 12m APEX at 850 μm , line and bolometric observations. These observations include optical and near-IR imaging and spectroscopy, and IFU observations.
- All of the above observing runs were obtained from original proposals accepted by the corresponding Time Allocation Committees (TACs).

14. Publications in International Refereed Journals

Current h-index of 20.

- Morelli, L., Calvi, V., Masetti, N., Parisi, P., Landi, R., Maiorano, E., Minniti, D., Galaz, G. "Stellar population properties for a sample of hard X-ray AGNs", 2013, A&A, 556, 135
- Masetti, N., Parisi, P., Palazzi, E. et al. "Unveiling the nature of INTEGRAL objects through optical spectroscopy. X. A new multi-year, multi-observatory campaign", 2013, A&A, 556, 120
- Ceccarelli, L., Herrera-Camus, R., Lambas, D., Galaz, G., Padilla, N. "Low and high surface brightness galaxies at void walls", 2012, MNRAS, 426, L6
- Parisi, P., Masetti, N., Jiménez-Bailón, E., Chavushyan, V., Palazzi, E., Landi, R., Malizia, A., Bassani, L., Bazzano, A., Bird, A., Charles, P., Galaz, G., Mason, E., McBride, V., Minniti, D., Morelli, L., Schiavone, F., Ubertini, P. "Accurate classification of 29 objects detected in the 39 month Palermo Swift/BAT hard X-ray catalogue", 2012, A&A, 545, 101
- N. Masetti, P. Parisi, E. Jiménez-Bailón, E. Palazzi, V. Chavushyan, L. Bassani, A. Bazzano, A. J. Bird, A. J. Dean, G. Galaz, R. Landi, A. Malizia, D. Minniti, L. Morelli, F. Schiavone, J. B. Stephen & P. Ubertini, "Unveiling the nature of INTEGRAL objects through optical spectroscopy. IX. Twenty two more identifications, and a glance into the far hard X-ray Universe", 2012, A&A, 538, 123
- Maiorano et al., "Searching for active galactic nuclei among unidentified INTEGRAL sources", 2011, MNRAS, 416, 531
- Galaz, G., Herrera-Camus, R., García-Lambas, D., & Padilla, N., "Low Surface Brightness Galaxies in the SDSS: The Link Between Environment, Star-forming Properties, and Active Galactic Nuclei", 2011, ApJ, 728, 74
- Adami et al., "The XMM-LSS survey: optical assessment and properties of different X-ray selected cluster classes", 2011, A&A, 526, 18
- Lira, E., Galaz, G., "GC 0029664-1188757: Photometry of Two Interacting Galaxies and Their Debris", 2010, AJ, 140, 1951
- Masetti, N., Parisi, P., Palazzi, E. et al., "Unveiling the nature of INTEGRAL objects through optical spectroscopy. VIII. Identification of 44 newly detected hard X-ray sources", 2010, A&A, 519, 96
- Masetti, N., Parisi, P., Palazzi, E. et al., "Revealing the Nature of New Unidentified Integral Sources", 2010, International Journal of Modern Physics D, 19, 819
- Parisi, P., Masetti, N., Jimenez, E., et al., "Accurate classification of 17 AGNs detected with Swift/BAT", 2009, A&A, 507, 1345
- Masetti, N., Parisi, P., Palazzi, E., Jiménez-Bailón, E., Morelli, L., Chavushyan, V., Mason, E., McBride, V. A., Bassani, L., Bazzano, A., Bird, A. J., Dean, A. J., Galaz, G., Gehrels, N., Landi, R., Malizia, A., Minniti, D., Schiavone, F., Stephen, J. B., Ubertini, P. "Unveiling the nature of INTEGRAL objects

through optical spectroscopy. VII. Identification of 20 Galactic and extragalactic hard X-ray sources", 2009, A&A, 495, 121

- Nakos, Th., Willis, J. P., Andreon, S., Surdej, J., Riaud, P., Hatziminaoglou, E., Garcet, O., Alloin, D., Baes, M., Galaz, G., Pierre, M., Quintana, H., Page, M. J., Tedds, J. A., Ceballos, M. T., Corral, A., Ebrero, J., Krumpke, M., & Mateos, S. "A multi-wavelength survey of AGN in the XMM-LSS field. I. Quasar selection via the KX technique", 2009, A&A, 494, 579
- Galaz, G., Cortés, P., Bronfman, L., & Rubio, M., "¹²CO(3-2) Emission in Spiral Galaxies: Warm Molecular Gas in Action?", 2008, ApJ, 677, L13
- Masetti, N., Mason, E., Morelli, L., Cellone, S. A., McBride, V. A., Palazzi, E., Bassani, L., Bazzano, A., Bird, A. J., Charles, P. A., Dean, A. J., Galaz, G., Gehrels, N., Landi, R., Malizia, A., Minniti, D., Panessa, F., Romero, G. E., Stephen, J. B.; Ubertini, P., Walter, R., "Unveiling the nature of INTEGRAL objects through optical spectroscopy. VI. A multi-observatory identification campaign", 2008, A&A, 482, 113
- Pacaud, F., Pierre, M., Adami, C., Altieri, B., Andreon, S., Chiappetti, L., Detal, A., Duc, P.-A., Galaz, G., Gueguen, A., and 23 coauthors, "The XMM-LSS survey: the Class 1 cluster sample over the initial 5 deg² and its cosmological modelling", 2007, MNRAS, 382, 1289
- Pierre, M., Chiappetti, L., Pacaud, F., Gueguen, A., Libbrecht, C., Altieri, B., Aussel, H., Gandhi, P., Garcet, O., Gosset, E., and 27 coauthors, "The XMM-Large Scale Structure catalogue: X-ray sources and associated optical data. Version I", 2007, MNRAS, 382, 279
- Landi, R., Masetti, N., Morelli, L., Palazzi, E., Bassani, L., Malizia, A., Bazzano, A., Bird, A. J., Dean, A. J., Galaz, G., and 2 coauthors, "The AGN Nature of 11 out of 12 Swift/RXTE Unidentified Sources through Optical and X-Ray Spectroscopy", 2007, ApJ, 109, 669
- Phillips, M., et al. "Optical and Near-Infrared Observations of the Peculiar Type Ia Supernova 1999ac", 2006, AJ, 131, 2615
- Masetti, N., Morelli, L., Palazzi, E., Galaz, G., Bassani, L. et al., "Unveiling the nature of INTEGRAL objects through optical spectroscopy. V. Identification and properties of 21 southern hard X-ray sources", A&A, 459, 21
- Pierre, M., Pacaud, F., Duc, P.-A., Willis, J., Andreon, S., Vltchanov, I., Altieri, B., Galaz, G., and 19 coauthors, "The XMM Large-Scale Structure survey: a well-controlled X-ray cluster 2006, MNRAS, 372, 591
- Folatelli et al., "SN 2005bf: A Possible Transition Event between Type Ib/c Supernovae and Gamma-Ray Bursts", 2006, ApJ, 641, 1039
- Galaz, G., Villalobos, A., Infante, L., Donzelli, C., "Bulge Evolution in Face-On Spiral and Low Surface Brightness Galaxies", 2006, AJ, 131, 2035
- Andreon, S., Quintana, H., Tajer, M., Galaz, G., Surdej, J., "The Butcher-Oemler effect at $z \sim 0.35$: a change in perspective", 2006, MNRAS, 365, 915
- Gawiser et al., "The Multiwavelength Survey by Yale-Chile (MUSYC): Survey Design and Deep Public UBVRIZ' Images and Catalogs of the Extended Hubble Deep Field-South", 2006, ApJS, 162, 1
- González, R. E., Padilla, N. D., Galaz, G., Infante, L., "The galaxy luminosity function around groups", 2005, MNRAS, 363, 1008
- Willis, J. P., Pacaud, F., Vltchanov, I., Pierre, M., Ponman, T., Read, A., Andreon, S., Altieri, B., Quintana, H., Dos Santos, S., and 7 coauthors, 2006, "The XMM Large-Scale Structure survey: an initial sample of galaxy groups and clusters to a redshift $z < 0.6$ " 2005, MNRAS, 363, 675
- Menanteau, Felipe; Martel, André R, Tozzi, Paolo; Frye, Brenda; Ford, Holland C, Infante, Leopoldo; Benítez, Narciso; Galaz, Gaspar; Coe, Daniel; Illingworth, Garth D, and 2 coauthors, "The Nature of Blue Cores in Spheroids: A Possible Connection with Active Galactic Nuclei and Star Formation", 2005, ApJ, 620, 697
- de Lapparent, V., Arnouts, S., Galaz, G., Bardelli, S., "The ESO-Sculptor Survey: Evolution of late-type galaxies at redshifts 0.1-0.5", 2004, A&A, 422, 841
- de Lapparent, V., Galaz, G., Bardelli, S., Arnouts, S., "The ESO-Sculptor 11. Survey: Luminosity functions of galaxies per spectral type at redshifts 0.1-0.5", 2003, A&A, 404, 831

- Temporin, S, Weinberger, R, Galaz, G, Kerber, F., “Candidate Tidal Dwarf Galaxies in the Compact Group CG J1720-67.8”, 2003, ApJ, 587, 660
- Temporin, S, Weinberger, R, Galaz, G, Kerber, F., “CG J1720-67.8: A Detailed Analysis of Optical and Infrared Properties of a New Ultracompact Group of Galaxies”, 2003, ApJ, 584, 239
- Strolger, L.-G, Smith, R. C, Suntzeff, N. B, Phillips, M. M, Aldering, G, Nugent, P, Knop, R, Perlmutter, S, Schommer, R. A, Ho, L. C, and 32 coauthors, “The Type Ia Supernova 1999aw: A Probable 1999aa-like Event in a Low-Luminosity Host Galaxy”, 2002, AJ, 124, 2905
- Stritzinger, Maximilian; Hamuy, Mario; Suntzeff, Nicholas B, Smith, R. C, Phillips, M. M, Maza, José; Strolger, L.-G, Antezana, Roberto; González, Luis; Wischnjewsky, Marina; and 7 coauthors, “Optical Photometry of the Type Ia Supernova 1999ee and the Type Ib/c Supernova 1999ex in IC 5179”, 2002, AJ, 124, 2100
- Galaz, G, Dalcanton, J, Infante, L, Treister, E., “Properties of Low Surface Brightness Galaxies and Normal Spirals in the Near-Infrared”, 2002, AJ, 124, 1360
- Hamuy, Mario; Pinto, Philip A, Maza, José; Suntzeff, Nicholas B, Phillips, M. M, Eastman, Ronald G, Smith, R. C, Corbally, C. J, Burstein, D, Li, Yong; and 14 coauthors, “The Distance to SN 1999em from the Expanding Photosphere Method”, 2001, ApJ, 558, 615
- Galaz, G., “E+A Galaxies in the Near-Infrared: Broadband Photometry”, 2000, AJ, 119, 2118
- Kerber, F, Furlan, E, Roth, M, Galaz, G, Chanamé, J. C., “Investigating New Planetary Nebulae in the Southern Hemisphere”, 2000, PASP, 112, 542
- Galaz, G, de Lapparent, V., “The ESO-Sculptor Survey: spectral classification of galaxies with $Z < 0.5$ ”, 1998, A&A, 332, 459
- Galaz, G, Ruiz, M. T, Thompson, I, Roth, M., “NGC 2477: Photometry and luminosity function”, 1996, A&AS, 119, 413

15. Other Publications (unrefereed)

- Galaz, Gaspar; Ceccarelli, L.; Herrera-Camus, R.; Garcia-Lambas, D.; Padilla, N. D. 2013, “Voids, Walls and Low Surface Brightness Galaxies”, American Astronomical Society, AAS Meeting 221, 132.02
- Galaz, G., Herrera-Camus, R., García-Lambas, D., & Padilla, N. 2012, “Low Surface Brightness Galaxies and The AGN Connection: New Insights from the SDSS Survey”, American Astronomical Society, AAS Meeting 219, 441.12
- Lotz, J., et al. 2010, “Galaxy Evolution with the LSST”, American Astronomical Society, AAS Meeting 215, 401.11
- LSST Science Book, Version 2.0, LSST Science Collaborations, 237 Authors, 2009, arXiv:0912.0201
- Lacerna, I., Galaz, G., Morelli, L. 2009, “Analysis of bulges from spectra of low surface brightness galaxies”. Revista Mexicana de Astronomía y Astrofísica, Serie de Conferencias. XII Latin American IAU Regional Meeting, 35, 311
- Galaz, G. “A Warmer Interstellar Medium for Low Surface Brightness Galaxies?”, 2009, AAS, 213, 317.05
- Galaz, G., Cortés, P., Bronfman, L., Rubio, M. 2008, “ $^{12}\text{CO}(J=3\rightarrow 2)$ detections in bulges of low surface brightness galaxies with APEX”, IAU Symposium, 245, 191
- Galaz, G., Villalobos, A., Morelli, L., Donzelli, C., Infante, L., “News from bulges hosted by low surface brightness galaxies”, 2007, IAU Series, vol. 241, 509
- Morelli, L, Masetti, N, Bassani, L, Landi, R, Malizia, A, Bird, A. J, Ubertini, P, Galaz, G., “Optical classification of 3 Swift southern hard X-ray sources”, The Astronomer’s Telegram, 785, 1
- Galaz, G., Villalobos, A., Infante, L., Donzelli, C., “Bulge evolution in spirals and low surface brightness galaxies”, 2005, AAS, 207, 62.05
- Galaz, G, Infante, L, Villalobos, A, Dalcanton, J., “Constraining age and metallicity of bulges embedded in low surface brightness galaxies”, 2005, AIPC, 761, 405

- Gorosabel, J, Jensen, B. L, Galaz, G, Salinas, R, Hjorth, J, Fynbo, J. P. U, Pedersen, H, Watson, D, Jakobsson, P, Castro Ceron, J. M., "XRF 050509c optical afterglow", 2005, GCN, 3425, 1
- Stritzinger, M. D, Hamuy, M, Suntzeff, N. B, Smith, R. C, Candia, P, Phillips, M. M, Maza, J, Antezana, R, Wischnjewsky, M, Strolger, L.-G, and 5 coauthors, "Optical Photometry of the Type Ia SN 1999ee and the Type Ib/c SN 1999ex in IC 5179", 2002, AAS, 200, 9503
- Labbe, E, Galaz, G, Krisciunas, K, Suntzeff, N, Espinoza, J, Gonzalez, D, Phillips, M. M, Roth, M, Germany, L., "Well Sampled Light Curves of the Nearby Type Ia Supernova 1999ac", 2001, AAS, 199, 4702
- Alloin, D, Olsen, K, Galaz, G., Book Review: Stars, gas and dust in galaxies, Astronomical Society of the Pacific, 2000, Obs, 121, 348
- Clayton, G. C, Beshara, Y, Smith, T. L, Gordon, K. D, Kerber, F, Lawson, W. A, Crause, L, Galaz, G, Rauch, T., "The Ever Changing Circumstellar Nebula Around UW Centauri", 2000, AAS, 197, 816
- Galaz, G., "Near IR-Imaging of LSB Galaxies: the High and Low HI Content Cases", 2000, ASPC, 221, 195
- Alloin, Danielle; Olsen, Knut; Galaz, Gaspar, "Stars, Gas and Dust in Galaxies: Exploring the Links", 2000, ASPC, 221
- Galaz, G., "E+A Galaxies in the Near-IR: Field and Clusters", 2000, ASPC, 200, 410
- Temporin, S, Weinberger, R, Galaz, G., "On the Way to Stability: CG J1720-67.8, a Highly Evolved Compact Galaxy Group", 2000, AGM, 17, 81
- Galaz, Gaspar; de Lapparent, Valerie, "The ESO-Sulptor Survey: Galaxy Populations and Luminosity Function at Z less than or equal to 0.5", 1998, WFSC Conf., 157
- de Lapparent, V, Galaz, G, Arnouts, S, Bardelli, S, Ramella, M., "The ESO Sculptor faint galaxy survey: large-scale structure and galaxy populations at $0.1 < z < 0.5$ ", 1997, Msngr, 89, 21
- Galaz, G., « Classification Spectrale et Fonction de Luminosité des Galaxies Lointaines », PhD Thesis, Université de Paris VII, 17
- Galaz, G, de Lapparent, V., "Spectral Classification of Galaxies with $z < 0.5$ ", 1997, EUVL Conf., 394

16. Others

- Private Pilot (Airplane).