Nicolás Garavito-Camargo – Curriculum Vitae

Barbara Pichardo Future Faculty Fellow | University of Arizona, Tucson, AZ E-mail: nico.garavito@gmail.com | Website: jngaravitoc.github.io | Github: github.com/jngaravitoc

Research Interests: Galactic Dynamics – Astrophysical probes of Dark Matter – Computational Methods – High-Performance Computing – N-body Simulations – Software development

Appointments

Barbara Pichardo Future Faculty Fellow, University of Arizona, February 2025-August 2025.

NFHP Einstein Fellow, University of Maryland, September 2025 - August 2028.

Education and past positions

Flatiron Research Fellow, Flatiron Institute, October 2021-December 2024.

Ph.D., Astronomy and Astrophysics, University of Arizona, 2021.

Advisor: Dr. Gurtina Besla

M.Sc., Physics, Universidad de Los Andes, Bogotá, Colombia, 2015.

Advisor: Dr. Jaime E. Forero-Romero

B.Sc., Physics, Universidad Nacional de Colombia, Bogotá, Colombia, 2013.

Advisor: Dr. Rigoberto A. Casas Miranda

Scholarships and Awards

- · NFHP Einstein Fellow, University of Maryland, September 2025-August 2028.
- · Barbara Pichardo Future Faculty Fellowship University of Arizona 2025-2027.
- · University of Arizona, Theoretical Astrophysics Program, Graduate Student Research Prize 2021.
- · University of Arizona College of Science award for Excellence in Service for graduate students, 2020. (Awarded to one graduate student across the college of science per year.)
- · University of Arizona theory travel grant, 2016, 2018.
- · McCarthy-Stoeger Scholarship 2015-2017, Vatican Observatory.

Students supervision

I have had the privilege of advising or co-advising a total of eight students (five Ph.D., three undergraduates) from diverse backgrounds.

- Richard Brooks (Graduate Student at University of College London), Spring 2024 present. I am advising Richard on one research project that was submitted for publication to ApJ (see article 29 in the publications section). We are currently working on a second paper, expected for submission in Fall 2025.
- Elise Darragh-Ford (Graduate student at Stanford), Fall 2023-Summer 2024. I advised Elise on a research project that was the final chapter of her Ph.D. thesis, resulting in one paper currently under preparation.
- · Silvio Varela (Graduate student at Universidad de la Serena), Fall 2022-present. I am currently co-advising Silvio on a research project that will lead to a paper now in preparation

- · Arpit Arora (Graduate student at University of Pennsylvania); Fall 2021-present. I am currently co-advising (now Dr.) Arpit on two research projects: one paper has been accepted to ApJ (see article 27th in the publications section), and another was submitted in Spring 2025 (see Article 33th in the publication section).
- · Hayden Foote (Graduate student at University of Arizona), Fall 2021-present I co-advised Hayden on a research project that resulted in a submitted publication (see article 28th in the publications section), and a second paper is currently in preparation.
- · Andrew Eden (Undergraduate at Florida Institute of Technology), Fall 2022-Fall 2023. I advise Andrew on his undergraduate thesis project which will result in a paper that is currently in preparation. All the code that Andrew develop for his project is publicly available on Github.
- · Ludia Adhikary (Undergraduate CUNY), supervised through the AstroCOM CUNY/CCA program; NYC Summer 2022-Summer 2023. Ludia presented her work at the CCA symposium and she presented two posters. One at the SACNAS conference in 2022 and one at the winter AAS of 2023.
- · Stephanie Carolina Cely Rodriguez (Undergraduate at Universidad Nacional de Colombia), I advise undergraduate Stephanie on her undergraduate thesis as part of the RECA summer program in Summer 2022. Stephanie successfully graduated in Summer 2023. A talk contribution from Stephanie was given at the RECA symposium and can be watch here.

Teaching Experience

Principal lecturer of 3 courses for undergraduate level in physics for a total of 180 hours of teaching time. Teaching assistant for 3 courses.

- · Guest Lecturer for the graduate Galaxies class, Columbia University, Fall 2022.
- · Teaching assistant for the Astronomy Tutoring for Majors & Minors Program. University of Arizona, Spring 2019.
- · Teaching assistant for the Computational Physics class PHYS305. University of Arizona. Spring 2018.
- · 3 times Lecturer of the Computational Tools at Universidad de los Andes, spring semester 2014 spring 2015.
- · 3 times Lecturer of the computational Methods Laboratory at Universidad de los Andes, semester spring 2014 spring 2015.
- · Teaching assistant of the Computational Methods Universidad de los Andes, fall semester 2014.
- · Lecturer (for 3 different sessions) of the class Physics I Laboratory at Universidad de los Andes, fall semester 2013.

Academic Service

- · Lead coordinator of the EXP collaboration. I coordinate the cosmological simulations working group. I am in charge of 3 graduate students. Other responsabilities include: organizing in person meetings twice a year.
- · Science organizing committee of the Clouds over the Pyrenees conference to be held in Benasque, Spain from September 6-9, 2026.
- · Science organizing committee of the XMC workshop in Yellowstone to be held in May 26th-30th 2025, at the University of Montana.
- · Local and Science organizing committee of the Milky Clouds over Manhattan conference.
- · PhD. thesis committee of Dr.Silvio Varela (University of La Serena, Chile), Nov-2023.
- · Referee for: Astrophysical Journal (ApJ), Monthly Notices of the Royal Astronomical Society (MN-RAS), Nature, Nature Astronomy, Astronomy and Astrophysics (A&A), and the Galaxies Journal.
- · Beyond-BFE collaboration coordinator: I lead the cosmological simulation group, organize in person and online meetings.
- · Mentor at the City University of New York CUNY-CCA program for undergraduate students at CUNY working with mentors at the CCA, summer 2022.
- · Proposal reviewer for Colombian Science Clubs, 2018.

- · Local Organizing Committee of the Andean Cosmology School, Universidad de Los Andes, 2015.
- · Organizer of the student astronomy seminar at the Planetarium of Bogotá, 2014-2015.

Diversity, Equity, Inclusion (DEI) and outreach leadership:

DEI Leadership:

I have worked extensively to build supportive communities. I co-created a support network for astronomy students in Colombia, RECA, which has grown to 478 members, making it the largest student association in astronomy in Latin America. In 2020, I established a yearly mentorship program designed to support students in their careers. To date, we have worked with 141 students, each paired with a senior mentor for guidance. Additionally, we have compiled valuable resources, including career panels with guest speakers and online guides for applying to PhD programs. I have also secured funding to run this program through the IAU.

- · Co-creator of the 10-week RECA internship program for astronomy students in Colombia. May-August 2021.
- · Co-creator of the RECA mentorship program for astronomy students in Colombia. 2020-2024. (The mentorship program pairs up students with professional astronomers to provide guidance through the application process to graduate programs)
- · Career panelist for CUNY undergraduates in stem "an initiative to enable low-income, talented domestic students to pursue successful careers in promising STEM fields" organized by Professor Viviana Acquaviva. December 3rd 2021.
- · Co-organizer, Diversity Journal Club Steward Observatory, 2018-2021.
- · Creator, Astrocharlas, Steward Observatory, 2018-2021. (Spanish outreach series talks in astronomy)
- · Writer for Astrobitos, 2018-2021.
- · Mentor, Tucson Initiative for Minority Engagement in Science and Technology Program TIMESTEP, 2016-2018.

Outreach

- \cdot NYC Prison outreach program at MDC Brooklyn. Lead a 2 sessions in 2024 of 3-hour outreach session with Spanish speaking women and men. Program organizer: Kiyan Tavangar (U. Columbia)
- · Astronomy podcast in Spanish vision cosmica. I participated in 20 episodes talking about various topics of astronomy for non-specialist audiences.
- · Classroom astronomer, NOAO Project ASTRO, 2018-2019.
- · Discussion leader, NOAO Teen Astronomy Cafe, 2018.
- · Planetarium SpaceArt mentor for Children, Bogotá, Colombia, 2013-2014.

Open source and HPC experience

- · Core developer and active contributor of the python packages: (Core developer) EXPtools, (Core developer) NBA, Cranes. (Contributor) py-Ananke, (Contributor) gala, (Contributor) halo analysis, (Contributor) gizmo analysis.
- · Expertise with HPC N-body codes: Gadget-3, 4, EXP (CPU & GPU), AREPO.

Scientific Talks

47 Total: 18 Invited (denoted by †), 26 in North America, 6 in Europe, 9 in Latin America, 1 Asia.

Conferences (18)

- Valencia Workshop on the Small-Scale Structure of the Universe and Self-Interacting Dark Matter, Valencia, June 2025.
- · XMC II Clouds over Yellowston, University of Montana, May 2025.
- · KITP workshop "Dark Matter Theory, Simulation, and Analysis in the Era of Large Surveys", UC Santa Barbara, June 2024. †
- · The Milky Way is not an island, Sexten, February, 2024.
- · Surveying the Milky Way: The Universe at our backyard. Caltech, Pasadena, October, 2023.
- · Friends of Friends meeting, Cordoba, Argentina, April, 2023. †
- · IAU 379: Dynamical masses of local group galaxies, contributed talk, March, 2023.
- · IAU 377: Early Disk-Galaxy Formation from JWST to the Milky Way, contributed talk, February, 2023.
- · Colombian Congress of Astronomy, Plenary talk, August, 2022. †
- · Friends of friends meeting, Cordoba, Argentina, April, 2022.
- · Division on Dynamics Astronomy, Virtual meeting, May 2021.
- · Streams 21, Virtual Conference, February 2021.
- · The Local Group: Assembly and Evolution, virtual conference, August 2020.
- · European Astronomical Society meeting, virtual meeting, June 2020.
- · Durham University, UK, Small Galaxies Cosmic Questions, August, 2019.
- · MPIA, Heidelberg, Stellar halos across the cosmos, July 2018.
- · LARIM, Cartagena, Colombia, October 2016.
- · EWASS, Geneve, Switzerland, July 2014.

Seminars and Colloquia (33)

- · CTC seminar, University of Maryland, April 2025.†
- · UC Santa Barbara, seminar, June 2024. †
- · KITP UC Santa Barbara, seminar, June 2024. †
- · UC Riverside, seminar, October 2023. †
- · Universidad de La Serena, La Serena, Chile, May 2023. †
- · Instituto de Astronomía y Física del Espacio (IAFE), Buenos Aires, April, 2023.
- · Max Planck Institute for Astrophysics, Cosmology Seminar, March, 2023.
- · U. Rutgers, Astronomy Seminar, Nov. 2022. †
- · U. Columbia, Lunch talk, Sept, 2022. †
- · STScI, galaxies lunch talk, May, 2022. †
- · Universidad de Antíoquia, seminar, February, 2022. †
- · University of Massachusetts, Amherst, Colloquium, Jan, 2022. †
- · University of Madison-Wisconsin, Science seminar, November 2021.†
- · University of Michigan, Galaxies group seminar, November 2021.†
- · NYU, CCPP, seminar, November 2021.†
- · CCA, Flatiron Institute, Lunch Talk, October, 2021.
- · Steward Observatory, Theoretical Astrophysics Program (TAP) colloquium, September, 2021.†
- · ComSciCon, June 2021. †.
- · Steward Observatory, Galaxy lunch talk, March, 2021.
- · Univesidad de los Andes, Astronomy Seminar, February, 2021.
- · UC Irvine, Astronomy Seminar, January, 2021. †
- · Steward Observatory, Early Career Scientist talk, December, 2020. †

- · CCAPP, Seminar, December, 2020. †
- · Princeton, Journal Club, November 2020. †
- · KIPAC, Stanford, Tea-Talk, October 2020.
- · Harvard Center for Astrophysics, GCSP seminar, October 2020.
- · Carnegie Observatories, seminar, October 2020. †
- · University of California Berkeley, lunch talk, September 2020.
- · The Royal Observatory of Edinburgh, UK, Coffee Talk, August 2019. †
- · W.M. Keck Observatory, Journal Club, June 2019.
- · Magellanic Cloud Fest III, University of Arizona, May, 2019.
- · JILA Seminar, JILA Institute, University of Colorado, December 2017.
- · STScI Galaxies Journal Club. December 2016.
- · Magellanic Cloud Fest II, University of Arizona, March 2016.
- · UNAM, Mexico City, Mexico, Nov 2013.
- · Centro de Investigaciones De Astronomía CIDA, Merida, Venezuela, July 2013.

 $\dagger Invited$

Posters

- · European Astronomical Society meeting, virtual meeting, June 2020.
- · Rediscovering our Galaxy, IAU symposium 334, Potsdam, Germany. July 2017.

Telescope and HPC time Awarded

- · Hubble Space Telescope, 32 orbits, Cycle 31, 2023. PI: Prof. Sukanya Chakrabarti (U. Alabama).
- · MareNostrum Super computer, 1.7 million CPU hours, AECT-2023-2-0016, 2023. PI: Prof. Chervin Laporte (U Barcelona).
- · GMRT 60 hours cycle 44, 2023. PI: Prof. Karin Menendez-Delmestre (Valongo Observatory, Rio de Janeiro).
- · Blanco Telescope, "A VISTA-DECam Experiment in Near-Field Cosmology: Search for the Magellanic Dark Matter Wake" cycle 2020B. PI: Prof. Julio Chaname (Universidad Catolica de Chile), 3 nights.

Grants

- · LSSTC Grant Award (Virtual Internship in Rubin/LSST Science to Provide Research Experience to Undergraduate Students in Colombian Institutions) 2021-51, 2021. CO-PI: Nicolás Garavito-Camargo. This grant was awarded to support undergraduate research summer projects.
- · International Astronomical Union (IAU) Office of Astronomy development (OAD) grant 2021. PI: Nicolás Garavito-Camargo. This grant was awarded to support the mentorship program for undergraduate students in Colombia.
- · University of Arizona theory travel grant, 2016 and 2018.
- · IAU travel grant, 2016.

Observing Experience

- · DECam, Blanco-4m telescope, CTIO, Chile, 3 nights, 2020.
- · VATT telescope. Mt Graham, Arizona, 4 nights, 2016.
- · CIDA, Merida, Venezuela 2 nights, 2013.

Research highlights in the news

- · https://phys.org/news/2025-02-supermassive-black-hole-large-magellanic.htmlPhys.org: There could be a supermassive black hole in the Large Magellanic Cloud hurling stars at the Milky Way.
- · Sky & Telescope: How our largest dwarf galaxy keeps other in line
- · JPL Nasa: Astronomers Release New All-Sky Map of Milky Way's Outer Reaches
- · Syfy Wire: Dark Matter could be powering a galaxy that orbits the Milky Way until they collide
- · Astrobites:
- · Phys.org: Astronomers release new all-sky map of the Milky Way's outer reaches
- · University of Arizona news: Astrophysicist help chart dark matters invisible ocean
- · AAS NOVA 2020: An Asymmetric Dark Matter Halo
- · AAS NOVA 2019: Hunting for a Dark Matter Wake

Publications list

Refereed: 33– First author: 5 – Supervised students: 3 (denoted by \dagger) – Co-supervised students (denoted by \dagger) h–index: 15 – citations: 1259 (as of May 30th, 2025) ORCID, ADS, arXiv, Google Scholar

First author publications or with significant contributions as mentor

- 33. †Shaping the Milky Way: The interplay of mergers and cosmic filaments. Arpit Arora, Nicolás Garavito-Camargo, Robyn E. Sanderson, Martin D. Weinberg, Michael S. Petersen, Silvio Varela-Lavin, Facundo A. Gómez, Kathryn V. Johnston, Chervin F. P. Laporte, Nora Shipp, Jason A. S. Hunt, Gurtina Besla, Elise Darragh-Ford, Nondh Panithanpaisal, Kathryne J. Daniel. (ApJ Submitted 2025).
- 32. Implications for a High Mass M31: M33's Orbital History and M31's Response to the Passage of M33. Ekta Patel, Nicolás Garavito-Camargo, Ivanna Escala. (ApJ in press 2025.)
- 31. †LMC Calls, Milky Way Halo Answers: Disentangling the Effects of the MW-LMC Interaction on Stellar Stream Populations Richard A. N. Brooks, Nicolás Garavito-Camargo, Kathryn V. Johnston, Adrian M. Price-Whelan, Jason L. Sanders, Sophia Lilleengen. ApJ in press 2024. [2 citations]
- 30. ‡Segue 2 Recently Collided with the Cetus-Palca Stream: New Opportunities to Constrain Dark Matter in an Ultra-Faint Dwarf Hadyen R. Foote, Gurtina Besla, Nicolás Garavito-Camargo, Ekta Patel, Guillaume F. Thomas, Ana Bonaca, Adrian M. Price-Whelan, Annika H. G. Peter, Dennis Zaritsky, Charlie Conroy. ApJ in press 2024.
- 29. †LMC-driven anisotropic boosts in stream-subhalo interactions. Arora, A., Garavito-Camargo, N., Sanderson, R. E., Cunningham, E. C., Wetzel, A., Panithanpaisal, N., Barry, M. ApJ 974, 2, 2024. [8 citations]
- 28. On the co-rotation of Milky Way satellites: LMC-mass satellites induce apparent motions in outer halo tracers Nicolás Garavito-Camargo, Adrian M. Price-Whelan, Emily C. Cunningham, Jenna Samuel, Ekta Patel, Andrew Wetzel, Kathryn V. Johnston, Arpit Arora, Robyn E. Sanderson, Lehman Garrison, and Danny Horta. ApJ, 975, 1, 2023. [8 citations]
- 27. The Clustering of Orbital Poles Induced by the LMC: Hints for the Origin of Planes of Satellites Garavito-Camargo, Nicolás; Patel, Ekta; Besla, Gurtina; Price-Whelan, Adrian; Laporte, Chervin; Gómez, Facundo A; Kathryn V. Johnston; ApJ 923, 2, 2021. [30 citations]
- 26. Quantifying the impact of the Large Magellanic Cloud on the structure of the Milky Way's dark matter halo using Basis Function Expansions Garavito-Camargo, Nicolás; Besla, Gurtina; Laporte, Chervin; Price-Whelan, Adrian M.; et al. ApJ, 919, 109, (2021). [95 citations]
- 25. Quantifying the Stellar Halo's Response to the LMC's Infall with Spherical Harmonics. Cunningham, Emily C; Garavito-Camargo, Nicolas, Deason, Alis J; Johnston, Kathryn V. et al. ApJ, 898, 1,(2020). [52 citations]

- 24. Hunting for the DM Wake induced by the LMC. Garavito-Camargo, Nicolas; Besla, Gurtina; Laporte, Chervin F.P; Johnston, Kathryn V; Gómez, Facundo A; Watkins, Laura. ApJ Accepted, (2019). [162 citations]
- 23. The impact of gas bulk rotation on the morphology of the Lyman-alpha line. Garavito-Camargo, J.N; Forero-Romero J.E; Dijkstra M. ApJ, 795, 120, (2014). [10 citations]

Publications with significant contributions

- 22. The distant Milky Way halo from the Southern hemisphere: Characterization of the LMC-induced dynamical-friction wake. Manuel Cavieres, Julio Chanamé, Camila Navarrete, Yasna Ordenes-Briceño, Nicolás Garavito-Camargo, Gurtina Besla, Maren Hempel, Katherina Vivas, Facundo Gómez (ApJ in press 2024).
- 21. The All-Sky Impact of the LMC on the Milky Way Circumgalactic Medium Christopher Carr, Gerg L. Bryan, Nicolás Garavito, Gurtina Besla, David J. Setton, Kathryn V. Johnston (ApJ submitted 2024).
- 20. All-Sky Kinematics of the Distant Halo: The Reflex Response to the LMC Vedant Chandra, Rohan P. Naidu, Charlie Conroy, Nicolas Garavito-Camargo, Chervin F. P. Laporte, Ana Bonaca et al. (Submitted to ApJ 2024).
- 19. Structure, Kinematics, and Observability of the Large Magellanic Cloud's Dynamical Friction Wake in Cold vs. Fuzzy Dark Matter
 Hayden R. Foote, Gurtina Besla, Philip Mocz, Nicolás Garavito-Camargo, Lachlan Lancaster, Martin Sparre, Emily C. Cunningham, Mark Vogelsberger, Facundo A. Gómez, and Chervin F. P. Laporte, ApJ submitted 2023
- 18. Implications of the Milky Way travel velocity for dynamical mass estimates of the Local Group Katie Chamberlain, Adrian M. Price-Whelan, Gurtina Besla, Emily C. Cunningham, Nicolás Garavito-Camargo, Jorge Peñarrubia, Michael S. Petersen. ApJ (2022)
- 17. Detection of the All-Sky Response of the Galactic Halo to the Magellanic Clouds Conroy, Charlie; Naidu, Rohan P; Garavito-Camargo; Nicolás; Besla, Gurtina; et al. Nature (2021).
- 16. The orbital histories of Magellanic Satellites Using Gaia DR2 proper motions.
 Patel, Ekta; Kallivayalil, Nitya; Garavito-Camargo, Nicolas et. al., ApJ 893, 121, (2020).
- 15. Modelling the gas kinematics of an atypical Lyα emitting compact dwarf galaxy. Forero-Romero, Jaime E., Gronke, Max., Remolina-Gutiérrez, Maria Camila, Garavito-Camargo, Nicolas, Dijkstra M. MNRAS, 474, 12F, (2018).

Publications with moderate contributions

- 14. Where do High-Velocity Dark Matter Particles come from in the Milky Way?. Aidan DeBrae, Peter Behroozi, Nicolas Garavito-Camargo, Submitted to OJA 2025.
- 13. Hypervelocity Stars Trace a Supermassive Black Hole in the Large Magellanic Cloud. Jiwon Jesse Han, Kareem El-Badry, Scott Lucchini, Lars Hernquist, Warren Brown, Nico Garavito-Camargo, Charlie Conroy, Re'em Sari. ApJ in press 2025.
- Efficient and accurate force replay in cosmological-baryonic simulations. Arpit Arora, Robyn Sanderson, Christopher Regan, Nicolás Garavito-Camargo, Emily Bregou, Nondh Panithanpaisal, Andrew Wetzel, Emily Cunningham, Sarah Loebman, Adriana Dropulic, Nora Shipp. ApJ 977, 1, 2024.
- 11. Generating synthetic star catalogs from simulated data for next-gen observatories with py-ananke Adrien C. R. Thob, Robyn E. Sanderson, Andrew P. Eden, Farnik Nikakhtar, Nondh Panithanpaisal, Nicolás Garavito-Camargo, and Sanjib Sharma (In press JOSS 2024).

- Dark matter distribution in Milky Way-analog galaxies
 Natanael Gomes-Oliveira, K. Menéndez-Delmestre, T. S. Gonçalves, D. C. Rodrigues, M. Grossi,
 N. Garavito-Camargo, A. Araújo, P. P. B. Beaklini, Y. Cavalcante-Coelho, A. Cortesi, L. H. Quiroga-Nuñez, T. Randriamampandry. ApJ 2023.
- 9. The proto-galaxy of Milky Way-mass haloes in the FIRE simulation Horta, Danny; Cunningham, Emily C.; Sanderson, Robyn; Johnston, Kathryn V.; Deason, Alis; Wetzel, Andrew; McCluskey, Fiona; **Garavito-Camargo, Nicolás**; Necib, Lina; Faucher-Giguère, Claude-André; Arora, Arpit; Gandhi, Pratik J. (ApJ Submitted 2023)
- 8. Galactoseismology in cosmological simulations: Vertical perturbations by dark matter, satellite galaxies and gas. Garcia-Conde. B, Antoja. T, Roca-Fabrega. S, Gómez. G, Ramos. P,. Garavito-Camargo. N, Gómez-Flechoso, MA. (accepted for publication in MNRAS 2023)
- 7. The impact of the Large Magellanic Cloud on dark matter direct detection signals
 Smith-Orlik, Adam; Ronaghi, Nima; Bozorgnia, Nassim; Cautun, Marius; Fattahi, Azadeh; Besla,
 Gurtina; Frenk, Carlos S.; Garavito-Camargo, Nicolás; Gómez, Facundo A.; Grand, Robert
 J. J.; Marinacci, Federico; Peter, Annika H. G. JCAP submitted 2023
- Lopsided Galaxies in a cosmological context: a new galaxy-halo connection
 Silvio Varela-Lavin, Facundo A. Gómez, Patricia B. Tissera, Gurtina Besla, Nicolás, Garavito-Camargo, Federico Marinacci. Submitted to MNRAS 2022.
- 5. On the stability of tidal streams in action space
 Arpit Arora, Robyn E. Sanderson, Nondh Panithanpaisal, Emily C. Cunningham, Andrew Wetzel,
 Nicolás Garavito-Camargo. ApJ l, vol. 939, no. 1, (2022).
- 4. The highest-speed local dark matter particles come from the Large Magellanic Cloud. Besla, Gurtina; Peter, Annika; Garavito-Camargo, Nicolas. JCAP, 11, 13, (2019).
- 3. The influence of Sagittarius and the Large Magellanic Cloud on the stellar disc of the Milky Way Galaxy.

 Laporte, Chervin F. P; Johnston, Kathryn V; Gómez, Facundo A; Garavito-Camargo, Nicolas; Besla, Gurtina. MNRAS, 481, 286L, (2018).
- 2. The Extremely Luminous Quasar Survey in the Sloan Digital Sky Survey Footprint. II. The North Galactic Cap Sample.

 Schindler, Jan-Torge; Fan, Xiaohui; McGreer, Ian D; Yang, Jinyi; Wang, Feige; Green, Richard; Garavito-Camargo, Nicolas et al., ApJ, 863, 144S, (2018).
- 1. Response of the Milky Way's disc to the Large Magellanic Cloud in a first infall scenario. Laporte, C.; Gomez, F; Besla, Gurtina; Johnston, Kathryn V; & Garavito-Camargo, Nicolas. MNRAS, 473, 1218L, (2018).

White papers

- 3. NANCY: Next-generation All-sky Near-infrared Community surveY Jiwon Jesse Han, et al. (incl. Garavito-Camargo, N).call for white papers for the Roman Core Community Survey
- Mass Spectroscopy of the Milky Way
 Dey, Arjun. et al., (incl. Garavito-Camargo, N). Astro2020: Decadal Survey on Astronomy and
 Astrophysics, Vol. 51, Issue 3, id. 489 (2019).
- 1. The Multidimensional Milky Way.
 Sanderson, Robyn E .et al. (incl. Garavito-Camargo) 2019. Astro2020: Decadal Survey on Astronomy and Astrophysics, 2019, Vol. 51, Issue 3, id. 347 (2019).