Rebecca C. Levy

STScI Postdoctoral Fellow

Space Telescope Science Institute 3700 San Martin Dr. Baltimore, MD 21218 rlevy@stsci.edu rlevy.astro@gmail.com https://rclevy.github.io

Research Interests _____

I investigate

- The role of stellar feedback in shaping the interstellar medium and galaxy evolution
- Young, embedded star clusters, especially in the centers of nearby galaxies
- Starburst galaxies, especially NGC 253 and M 82
- Multiphase gas kinematics and dynamics in nearby galaxies

using multiwavelength photometric and spectroscopic data from ground- and space-based observatories (e.g., radio; (sub-)millimeter interferometric; near-, mid-, far-infrared; optical IFU)

Experience _____

Sept 2024 –	STScI Postdoctoral Fellow
present	Space Telescope Science Institute, Baltimore, MD, USA
	50%independent research / $50%$ functional work (JWST Science Policies Group)
Oct 2021 –	NSF Astronomy & Astrophysics Postdoctoral Fellow
Oct 2021 – Sept 2024	NSF Astronomy & Astrophysics Postdoctoral Fellow University of Arizona, Dept. of Astronomy/Steward Observatory, Tucson, AZ, USA

Education _____

Dec 2021	Ph.D. in Astronomy University of Maryland, College Park, MD, USA "Investigating Star Formation Feedback through Gas Kinematics in Nearby Galaxies" Advisor: Prof. Alberto Bolatto
Dec 2017	M.S. in Astronomy University of Maryland, College Park, MD, USA
May 2015	B.S. in Astronomy, B.S. in Physics University of Arizona, Tucson, AZ, USA Cum Laude with Honors

Publication Summary _____

Total: 49 papers — 1461 citations — h-index = 21 First-authored & supervised: 8 papers — 231 citations A full publication list can be found at the end.

First-Authored & Supervised Publications

- [8] "JWST Observations of Starbursts: Massive Star Clusters in the Central Starburst of M 82" Levy, R. C., et al. 2024, ApJL, 973, 55.
- [7] "Milky Way and Nearby Galaxies Science with the SALTUS Space Observatory" Levy, R. C., et al. 2024, JATIS, 10, 4, 042304.
- [6] "[CII] Spectral Mapping of the Galactic Wind and Starbursting Disk of M 82 with SOFIA" Levy, R. C., et al. 2023, ApJ, 958, 109.
- [5] "The Morpho-Kinematic Architecture of Super Star Clusters in the Center of NGC 253" Levy, R. C., et al. 2022, ApJ, 935, 19.
- [4] "Cuspy Dark Matter Density Profiles in Massive Dwarf Galaxies" Cooke, L. H., Levy, R. C., et al. 2022, MNRAS, 512, 1012.
- [3] "Outflows from Super Star Clusters in the Central Starburst of NGC 253" Levy, R. C., et al. 2021, ApJ, 912, 4.
- [2] "The EDGE-CALIFA Survey: Evidence for Pervasive Extraplanar Diffuse Ionized Gas in Nearby Edge-On Galaxies" Levy, R. C., et al. 2019, ApJ, 882, 84.
- [1] "The EDGE-CALIFA Survey: Molecular and Ionized Gas Kinematics in Nearby Galaxies" Levy, R. C., et al. 2018, ApJ, 860, 92.

Honors	Яz	Awards
HUHUHA	(Y	\neg walus

2021	IAU PhD Prize — Honorable Mention (Only a single winner and honorable mention were awarded in this division.)	IAU, Div. H: Interstellar Matter and
		Local Universe
2020	Andrew S. Wilson Prize for Excellence in Research	U. Maryland,
		Dept. of Astronomy
2020	Philip E. Angerhofer Outstanding Teaching Assistant Award	U. Maryland,
		Dept. of Astronomy
2020	Prize for Excellence in Mentoring	U. Maryland,
		Dept. of Astronomy
2018 - 2019	Outstanding Research Assistant Award	U. Maryland,
		Graduate School
2016	Graduate Research Fellowship Program — Honorable Mention	NSF

Grants Awarded _

2022	\$44,473	NSF	"21st Annual Symposium of the NSF Astronomy and Astrophysics Postdoctoral Fellows"
2021	\$310,000	NSF AAPF	"A Multiscale View of the Effects of Stellar Feedback in the Local Universe"
2019	\$35,000	NRAO	ALMA Student Observing Support
2019	\$90,000	SOFIA/USRA/ NASA	"The GREAT Cigar: Mapping [CII] in the Disk and Outflow of M82"
2019	\$600	U. Maryland	The Jacob K. Goldhaber Travel Grant

2017	\$600	Grad. School	
2019	\$225	U. Maryland	International Conference Student Support Award
2017	\$262	Grad. School	

Scientific Presentations

Invited Review	vs and Colloquia	
Feb 2025	Texas A&M U. Astronomy Colloquium	College Station, TX
Oct 2023	Instituto de Astrofísica de Andalucía Colloquium (Recorded)	(Virtual)
Oct 2023	Radboud U. Astronomy Colloquium	(Virtual)
Apr 2023	The Galactic Centre Workshop — Review Talk	Granada, Spain
Apr 2023	Hamburg Observatory Colloquium	(Virtual)
Apr 2023	Michigan State U. Astronomy Seminar	(Virtual)
Oct 2022	U. Kansas Physics and Astronomy Department Colloquium	Lawrence, KS
Oct 2019	The Warm Ionized Medium Workshop — \mathbf{Review} Talk	Green Bank, WV
Invited Talks		
$\mathrm{Aug}\ 2025$	Ascona Meeting on Cosmic ISM and Stellar Populations	Ascona, Switzerland
Oct 2024	Center for Astrophysics (CfA) Seminar	Cambridge, MA
Apr 2024	U. Wisconsin, Madison Monday Science Seminar	(Virtual)
Dec 2023	ALMA at Ten Years: Past, Present and Future	Puerto Varas, Chile
July 2021	The Grande Cascade	(Virtual)
May 2021	Cornell Galaxy Lunch Seminar	(Virtual)
Feb 2021	Princeton Star Formation/ISM Rendezvous	(Virtual)
Nov 2020	Ringberg Workshop Virtual Seminar: "How does small-scale	(Virtual)
	physics drive galaxy evolution?"	
Oct 2020	Center for Cosmology & AstroParticle Physics Seminar	(Virtual)
Contributed T	alks (past 3 years)	
May 2025	Inter+Stellar: Harnessing the Intersection Between Stars and the Interstellar Medium	Baltimore, MD
Nov 2024	Follow the Monarchs: A Journey to Explore the Cosmos at	Morelia, Mexico
	(Sub)milliarcsecond Scales with the ngVLA (Recorded)	
May 2024	STScI Low Density Universe Meeting	Baltimore, MD
Jan 2024	The 243 st Meeting of the American Astronomical Society	New Orleans, LA
Jan 2024	2024 NSF-AST Fellows Symposium	New Orleans, LA
Jan 2023	The 241 st Meeting of the American Astronomical Society	Seattle, WA
Sept 2022	MPIA Galaxy Coffee Seminar	Heidelberg, Germany
Sept 2022	Puzzles of the Galactic Centre	Heidelberg, Germany
Press, Media,	& Other Coverage	
June 2025	NIRCam and MIRI images of M 82 from JWST program #1 NASA/ ESA/CSA JWST Picture of the Month: "A starburst sha	
Apr 2024	Quoted in NASA Press Release "NASA's Webb Probes an Extrem (Cross-posted by ESA, Webb Telescope, Space.com, U. Arizona, U. M	•
Aug 2022	Results from Levy et al. 2022, ApJ cited in the Wikipedia page	for NGC 253.
May 2021	Results from Levy et al. 2021, ApJ featured in the NRAO eNew	
1.10, 2021	1000 1000 1000 1000 1000 1000 1000 100	J . 01. 11, 10000 0.

Students Mentor	red		
Melnick Nebart	Summer 2025	STScI Space Astronomy Summer Program (SASP) Publication: Nebart & Levy, 2025 in prep. Undergrad at Columbia U.	
Keaton Donaghue	Oct 2022 –	Co-mentor Publication: Donaghue, Levy, et al. 2025 in pre Undergrad at U. Kansas & NSF GRFP grad student at U	_
Lauren Cooke	May 2020, Summer 2019	Publication: Cooke, Levy, et al. 2022, MNRAS High school senior & undergrad at Harvard U. (Now: AI I	Oata Analyst)
Brandon Davey	Jan 2020	GRAD-MAP Winter Workshop Publication: Cooke, Levy, Davey, et al. 2022, M. Undergrad of U. of South Florida (Now: Software Engine	
Nathnael Feleke	Summer 2019, Jan 2019	GRAD-MAP Summer Scholars Program & Winter V Undergrad at Montgomery College, Takoma Park	Vorkshop
Aurora Cid	Jan 2018	GRAD-MAP Winter Workshop Undergrad at CUNY College of Staten Island	
Natalia Ramírez Vega	Jan 2017	GRAD-MAP Winter Workshop Undergrad at U. Costa Rica & Fidélitas U. (Now: Senior	Data Enginee
A&A, AJ, ApJ, MNRA	AS		
Feb 2025 – present Apr 2022 – Oct 2024		ic Ecosystems" science working group y Way & Nearby Galaxies" science working group	
Conferences organiz	zed		
May 2024	"Spatio-spectral Wideband Era"	Modeling of Interferometric Data: Preparing for the	SOC
Jan 2023 Oct 2019			Co-organizer SOC
Seminars organized			
$\begin{array}{c} 2022-2023 \\ 2019-2020 \end{array}$		cience Coffee arXiv discussion Astronomy weekly arXiv discussion	
Review panels			
Mar 2024 Cycle 31 Mar 2023	NASA Review I HST TAC NSF Review Pa	Panel — Executive Secretary	

UMD Dept. of Astronomy Graduate Student Council rep.

UMD Dept. of Astronomy faculty search committee

 $Committee \ service \ _$

Spring 2020

2017 - 2020

Other service	
(Carried out as part of S	TScI Fellowship functional duties.)
Cycle 5 Cycles 4, 5	Co-lead editor of the JWST Call for Proposals JWST TAC Panel Manager
Collaboration mem	bership
Sept 2024	STScI ISM* research group
Apr 2023	ACES/JACKS (ALMA CMZ Exploration Survey/JVLA Ammonia CMZ K-band Survey)
Dec 2022 Aug 2015	PHANGS (Physics at High Resolution in Nearby GalaxieS) EDGE (Extragalactic Database for Galaxy Evolution)
_	membership
v	nical Union (IAU) — Junior member
American Astronomica	al Society (AAS) — Full member
Approved Obser	ving Programs
	e Millimeter/submillimeter Array)
PI of 3 programs:	
_	$Embedded\ Star\ Formation\ and\ Feedback\ in\ the\ Prototypical\ Merger-Starburst\ VV\ 114"$
•	Molecular Gas Coverage in Nearby Low-Luminosity AGN"
_	Radiation Field, Masses, and Dust Temperature in Forming Massive Star Clusters Starburst"
Co-I on a total of 32 pro	grams in Cycles 12 (N=6 incl. 1 large), 11 (6), 10 (9), 9 (3), 8 (3), 7 (2), 6 (2), 4 (1).
GBT (Green Bank Teles	scope)
I am certified to remotely	
Co-I on a total of 3 prog	grams in Semesters 2022b (1), 2021b (1 large), 2021a (1).
HST (Hubble Space Tele	escope)
Co-I on a total of 2 prog	grams in Cycles 32 (1), 31 (1 treasury).
NOEMA (Northern Ex	ttended Millimeter Array)
`	grams in Semesters 2022a (1), 2021b (1).
JWST (James Webb Sp	pace Telescope)
Co-I on a total of 6 prog	grams in Cycles 3 (1), 2 (3 incl. 1 treasury), 1 (2), including:
Cycle 1 "Dissecting t	the Prototypical Starbursts NGC 253 and M 82 and Their Cool Galactic Winds"
	nical planning and justification for this proposal.
, –	Telescope)gram in Semester 2021-S1 (1).
SMA (Submillimeter Ar	ray)
	grams in Semesters 2025A (1), 2024B (1), 2018B (1).
SOFIA (Stratospheric (Observatory for Infrared Astronomy)
PI of 1 program:	
- '	REAT Cigar: Mapping [CII] in the Disk and Outflow of M82"
Co-I on a total of 5 prog	grams in Cycles $9(1)$, $8(2)$, $7(2)$.
Co-I on a total of 8 prog	grams in Semesters 2025a (1), 2024b (1), 2022b (2), 2022a (2), 2021b (1), 2019b (1).

•	-	
Apr 2023	Guest Lecturer: "Translational Science Communication" ACBS 493/ECOL 499/GEOS 393/NSCS 393: The Bio/Diversity Project Internship Program	U. Arizona
Spring 2020	Teaching and Lab Assistant ASTR 121: Introductory Astrophysics II — Stars & Beyond	U. Maryland
Fall 2019	Teaching Assistant ASTR 120: Introductory Astrophysics I — Solar System	U. Maryland
Sept 2018	Guest Lecturer: "LaTeX Examples with Overleaf" ASTR 695: First Year Seminar	U. Maryland
Spring 2014	Preceptor PHYS 141: Introductory Mechanics	U. Arizona
Spring 2013	Undergraduate Teaching Coordinator MATH 100/100AX: Prep. for College Algebra	U. Arizona

Outreach Experience -

Imagine Your STEM Future (IYSF)

Women in Science and Engineering (WISE), U. Arizona

Teaching Experience _____

Undergraduate Teaching Coordinator

Lead Undergraduate Teaching Assistant

Undergraduate Teaching Assistant

MATH 100/100AX: Prep. for College Algebra

MATH 100/100AX: Prep. for College Algebra

MATH 100/100AX: Prep. for College Algebra

Aug 2023 – Sept 2024 • Developed and implemented a hands-on astronomy lesson and activity for the WISE IYSF program. Materials for my curriculum about the phases of the Moon can be found in this Google Drive repository.

Moon can be found in this Google Drive repository.

U. Arizona

U. Arizona

U. Arizona

Mar 2024, Feb 2023 • Guest lecturer on my career path for students in IYSF program.

Public Lectures _

Fall 2012

Spring 2012

Fall 2011

Dec 2022 • Tucson Amateur Astronomy Association Lecture: "A JWST View of Starburst Galaxies: Sweet Data Coming Soon!"

Nov 2022 • Steward Observatory Public Evening Lecture Series: "A JWST View of Starburst Galaxies: Sweet Data Coming Soon!"

Public Events _

Engaged with the public through astronomy/physics/optics demonstrations and activities.

Apr 2016 • U.S. Science and Engineering Festival

March 2014, 2015 • Tucson Festival of Books (part of NOAO EPO, see below)

June 2013 – 2015 • Arizona-Sonora Desert Museum Cool Summer Astronomy Night (2014, 2015 part of NOAO EPO, see below)

GRAD-MAP

(Graduate Resources Advancing Diversity with Maryland Astronomy and Physics)

Dept. of Astronomy, U. Maryland

2016 - 2020

- Research mentor for four students over four years during the week-long Winter Workshop.
- Co-mentor for one student during the 10-week Summer Scholars program.
- Helped plan Winter Workshops and Summer Scholars programs.
- Developed and led professional development sessions during the Winter Workshops and Summer Scholars programs.
- Co-organized and led two weekend trips to the Green Bank Observatory.
- Helped organize and run the annual Open House, including helping to develop the inaugural Open House.
- Attended Collaborative Seminar Series at local institutions.

Education and Public Outreach (EPO) Department.

National Optical Astronomy Observatory (NOAO) (Note: NOAO is now NOIRLab)

- Aug 2013 July 2015 Key developer of all aspects of the United Nations-sanctioned "International Year of Light 2015" Quality Lighting Teaching Kit, including activity creation and development, materials sourcing, instructional guide and media writing, state and national educational standards verification, and classroom testing. These kits were disseminated internationally and were available for retail sale.
 - Interacted extensively with the public, K-12 students, K-12 teachers, and members of the Tohono O'odham Nation.
 - Developed, planned, prepared, led, and/or supported 1-2 outreach activities per week (on average) focused on astronomy and/or dark skies education.
 - Developed, planned, prepared, led, and/or supported local, national, and international teacher training workshops and outreach events (e.g., at AAS, AGU, and IAU meetings).
 - Supported the Globe at Night citizen-science campaign, including website design, social media, development of materials, newsletter writing, podcast writing and recording, and facilitation of material translations.
 - Hired, trained, mentored, and evaluated other student employees.

June 2016, 2015

• Guest lecturer and support staff for two Colors of Nature Summer Academies in Tucson, AZ. This NSF-funded educational research study investigated the development of middle-school girls' identities as scientists as they explored the intersections of art and science (STEAM) in a two-week program.

Full Publication List

Total: 49 papers — 1461 citations — h-index = 21Links to current publications in ADS, SciX, and ORCID.

- [49] "Cold dark gas in Cygnus X: The first large-scale mapping of low-frequency carbon recombination lines" Emig, K. L., Salas, P., Anderson, L. D., Anish Roshi, D., Bonne, L., Bolatto, A. D., Grenier, I. A., Levy, R. C., Linville, D. J., Luisi, M., Owens, M. R., Poojaprivatharsheni, J., Schneider, N., Tibaldo, L., Tielens, A. G. G. M., Walch, S. K., White, G. J. 2025, ApJ, in press, doi: 10.48550/arXiv.2501. 13838.
- [48] "Physical Conditions of the Ionized Superwind in NGC 253 with VLT/MUSE" Cronin, S. A., Bolatto, A. D., Congiu, E., Donaghue, K., Kreckel, K., Leroy, A. K., Levy, R. C., Veilleux, S., Walter, F., Nolasco, L. 2025, ApJ, 987, 92, doi: 10.3847/1538-4357/add738.
- [47] "JWST observations of starbursts: cold clouds and plumes launching in the M 82 outflow" Fisher, D. B., Bolatto, A. D., Chisholm, J., Fielding, D., Levy, R. C., Tarantino, E., Boyer, M. L., Cronin, S. A., Lopez, L. A., Smith, J. D., Berg, D. A., Lopez, S., Veilleux, S., van der Werf, P. P.,

Böker, T., Boogaard, L. A., Lenkić, L., Glover, S. C. O., Villanueva, V., Mayya, D., Lai, T. S. Y., Dale, D. A., Emig, K. L., Walter, F., Relaño, M., De Looze, I., Mills, E. A. C., Leroy, A. K., Meier, D. S., Herrera-Camus, R., Klessen, R. S. 2025, MNRAS, 538, 3068, doi: 10.1093/mnras/staf363.

- [46] "Tracing the Earliest Stages of Star and Cluster Formation in 19 Nearby Galaxies with PHANGS-JWST and HST: Compact 3.3 μm Polycyclic Aromatic Hydrocarbon Emitters and Their Relation to the Optical Census of Star Clusters"
 Rodríguez, M. J., Lee, J. C., Indebetouw, R., Whitmore, B. C., Maschmann, D., Williams, T. G., Chandar, R., Barnes, A. T., Gnedin, O. Y., Sandstrom, K. M., Rosolowsky, E., Leroy, A. K., Thilker, D. A., Kim, H., Sun, J., Klessen, R. S., Groves, B., Wofford, A., Boquien, M., Dale, D. A., Úbeda, L., Larson, K. L., Grasha, K., Johnson, K. E., Levy, R. C., Bigiel, F., Hassani, H., Sarbadhicary, S. K. 2025, ApJ, 983, 137, doi: 10.3847/1538-4357/adbb69.
- [45] "JWST Observations of Starbursts: Relations between PAH features and CO clouds in the starburst galaxy M82"
 Villanueva, V., Bolatto, A. D., Herrera-Camus, R., Leroy, A., Fisher, D. B., Levy, R. C., Böker, T., Boogaard, L., Cronin, S. A., Dale, D. A., Emig, K., De Looze, I., Donnelly, G. P., Lai, T. S. Y., Lenkic, L., Lopez, L. A., Lopez, S., Meier, D. S., Ott, J., Relano, M., Smith, J. D., Tarantino, E., Veilleux, S., Walter, F., van der Werf, P. 2025, A&A, 695, A202, doi: 10.1051/0004-6361/202553891.
- [44] "Central versus Global Quenching Traced by the APEX-CALIFA Survey"
 Barrera-Ballesteros, J. K., Cruz-González, I., Colombo, D., Sánchez, S. F., Levy, R. C., Villanueva, V., Wong, T., Bolatto, A., Alonso Hernández, D. 2025, ApJ, 978, 23, doi: 10.3847/1538-4357/ad85d1.
- [43] "Single Aperture Large Telescope for Universe Studies (SALTUS): Science Overview"
 Chin, G., Anderson, C. M., Bergner, J., Biver, N., Bjoraker, G. L., Cavalie, T., DiSanti, M., Gao, J.-R., Hartogh, P., Harding, L. K., Hu, Q., Kim, D., Kulesa, C., de Lange, G., Leisawitz, D. T., Levy, R. C., Lichtenberger, A., Marrone, D. P., Najita, J., Newswander, T., Rieke, G. H., Rigopoulou, D., Roefsema, P., Roth, N. X., Schwarz, K., Shirley, Y., Spilker, J., Stark, A. A., van der Tak, F., Takashima, Y., Tielens, A., Willner, D. J., Wollack, E. J., Yates, S., Young, E., Walker, C. K. 2024, JATIS, 10, 042310, doi: 10.1117/1.JATIS.10.4.042310.
- [42] "Disk Turbulence and Star Formation Regulation in High-z Main-sequence Analog Galaxies"
 Lenkić, L., Fisher, D. B., Bolatto, A. D., Teuben, P. J., Levy, R. C., Sun, J., Herrera-Camus, R.,
 Glazebrook, K., Obreschkow, D., Abraham, R. 2024, ApJ, 976, 88, doi: 10.3847/1538-4357/ad758c.
- [41] "JWST MIRI and NIRCam observations of NGC 891 and its circumgalactic medium"
 Chastenet, J., De Looze, I., Relaño, M., Dale, D. A., Williams, T. G., Bianchi, S., Xilouris, E. M., Baes, M., Bolatto, A. D., Boyer, M. L., Casasola, V., Clark, C. J. R., Fraternali, F., Fritz, J., Galliano, F., Glover, S. C. O., Gordon, K. D., Hirashita, H., Kennicutt, R., Nagamine, K., Kirchschlager, F., Klessen, R. S., Koch, E. W., Levy, R. C., McCallum, L., Madden, S. C., McLeod, A. F., Meidt, S. E., Mosenkov, A. V., Richie, H. M., Saintonge, A., Sandstrom, K. M., Schneider, E. E., Sivkova, E. E., Smith, J. D. T., Smith, M. W. L., van der Wel, A., Walch, S., Walter, F., Wood, K. 2024, A&A, 690, A348, doi: 10.1051/0004-6361/202451033.
- [40] "Neutral atomic and molecular gas dynamics in the nearby spiral galaxies NGC 1512, NGC 4535, and NGC 7496"
 Laudage, S., Eibensteiner, C., Bigiel, F., Leroy, A. K., Meidt, S., Schinnerer, E., de Blok, W. J. G., Querejeta, M., Stuber, S., Colombo, D., Rosolowsky, E., Pisano, D. J., Utomo, D., Levy, R. C., Klessen, R., Cao, Y., Koch, E. W., Kurapati, S., Sanchez-Blazquez, P., Neumann, J., Neumann, L., Pan, H.-A., Williams, T. G. 2024, A&A, 690, A169, doi: 10.1051/0004-6361/202450265.
- [39] "JWST Observations of Starbursts: Massive Star Clusters in the Central Starburst of M 82" Levy, R. C., Bolatto, A. D., Mayya, D., Cuevas-Otahola, B., Tarantino, E., Boyer, M. L., Boogaard,

L. A., Böker, T., Cronin, S. A., Dale, D. A., Donaghue, K., Emig, K. L., Fisher, D. B., Glover, S. C. O., Herrera-Camus, R., Jiménez-Donaire, M. J., Klessen, R. S., Lenkić, L., Leroy, A. K., De Looze, I., Meier, D. S., Mills, E. A. C., Ott, J., Relaño, M., Veilleux, S., Villanueva, V., Walter, F., van der Werf, P. P. 2024, ApJL, 973, L55, doi: 10.3847/2041-8213/ad7af3.

- [38] "Milky Way and Nearby Galaxies Science with the SALTUS Space Observatory"
 Levy, R. C., Tielens, A., Spilker, J., Marrone, D. P., Narayanan, D., Walker, C. K. 2024, JATIS, 10, 042304, doi: 10.1117/1.JATIS.10.4.042304.
- [37] "High-Redshift Extragalactic Science with the Single Aperture Large Telescope for Universe Studies (SALTUS) Space Observatory"
 Spilker, J., Levy, R. C., Marrone, D., Alberts, S., Chapman, S. C., Dickinson, M., Egami, E., Endsley, R., Narayanan, D., Rieke, G., Stark, A. A., Tielens, A., Walker, C. K. 2024, JATIS, 10, 042305, doi: 10.1117/1.JATIS.10.4.042305.
- [36] "PHANGS-HST Catalogs for ~100,000 Star Clusters and Compact Associations in 38 Galaxies. I. Observed Properties"
 Maschmann, D., Lee, J. C., Thilker, D. A., Whitmore, B. C., Deger, S., Boquien, M., Chandar, R., Dale, D. A., Wofford, A., Hannon, S., Larson, K. L., Leroy, A. K., Schinnerer, E., Rosolowsky, E., Úbeda, L., Barnes, A. T., Emsellem, E., Grasha, K., Groves, B., Indebetouw, R., Kim, H., Klessen, R. S., Kreckel, K., Levy, R. C., Pinna, F., Rodríguez, M. J., Tian, Q., Williams, T. G. 2024, ApJS, 273, 14, doi: 10.3847/1538-4365/ad3cd3.
- [35] "Hidden Gems on a Ring: Infant Massive Clusters and Their Formation Timeline Unveiled by ALMA, HST, and JWST in NGC 3351"
 Sun, J., He, H., Batschkun, K., Levy, R. C., Emig, K., Rodríguez, M. J., Hassani, H., Leroy, A. K., Schinnerer, E., Ostriker, E. C., Wilson, C. D., Bolatto, A. D., Mills, E. A. C., Rosolowsky, E., Lee, J. C., Dale, D. A., Larson, K. L., Thilker, D. A., Ubeda, L., Whitmore, B. C., Williams, T. G., Barnes, A. T., Bigiel, F., Chevance, M., Glover, S. C. O., Grasha, K., Groves, B., Henshaw, J. D., Indebetouw, R., Jiménez-Donaire, M. J., Klessen, R. S., Koch, E. W., Liu, D., Mathur, S., Meidt, S., Menon, S. H., Neumann, J., Pinna, F., Querejeta, M., Sormani, M. C., Tress, R. G. 2024, ApJ, 967, 133, doi: 10.3847/1538-4357/ad3de6.
- [34] "JWST Observations of Starbursts: Polycyclic Aromatic Hydrocarbon Emission at the Base of the M82 Galactic Wind"
 Bolatto, A. D., Levy, R. C., Tarantino, E., Boyer, M. L., Fisher, D. B., Cronin, S. A., Leroy, A. K., Klessen, R. S., Smith, J. D., Berg, D. A., Böker, T., Boogaard, L. A., Ostriker, E. C., Thompson, T. A., Ott, J., Lenkić, L., Lopez, L. A., Dale, D. A., Veilleux, S., van der Werf, P. P., Glover, S. C. O., Sandstrom, K. M., Skillman, E. D., Chisholm, J., Villanueva, V., Lai, T. S. Y., Lopez, S., Mills, E. A. C., Emig, K. L., Armus, L., Mayya, D., Meier, D. S., De Looze, I., Herrera-Camus, R., Walter, F., Relaño, M., Koziol, H. B., Marvil, J., Jiménez-Donaire, M. J., Martini, P. 2024, ApJ, 967, 63, doi: 10.3847/1538-4357/ad33c8.
- [33] "The EDGE-CALIFA Survey: An Extragalactic Database for Galaxy Evolution Studies"
 Wong, T., Cao, Y., Luo, Y., Bolatto, A. D., Sánchez, S. F., Barrera-Ballesteros, J. K., Blitz, L., Colombo, D., Dannerbauer, H., Green, A., Kalinova, V., Khan, F., Kim, A., Lacerda, E. A. D., Leroy, A. K., Levy, R. C., Lin, X., Luo, Y., Rosolowsky, E. W., Rubio, M., Teuben, P., Utomo, D., Villanueva, V., Vogel, S. N., Wang, X. 2024, ApJS, 271, 35, doi: 10.3847/1538-4365/ad20c9.
- [32] "The EDGE-CALIFA Survey: Molecular Gas and Star Formation Activity across the Green Valley" Villanueva, V., Bolatto, A. D., Vogel, S. N., Wong, T., Leroy, A. K., Sánchez, S. F., Levy, R. C., Rosolowsky, E., Colombo, D., Kalinova, V., Cronin, S., Teuben, P., Rubio, M., Bazzi, Z. 2024, ApJ, 962, 88, doi: 10.3847/1538-4357/ad1387.
- [31] "[CII] Spectral Mapping of the Galactic Wind and Starbursting Disk of M 82 with SOFIA"

Levy, R. C., Bolatto, A. D., Tarantino, E., Leroy, A. K., Armus, L., Emig, K. L., Herrera-Camus, R., Marrone, D. P., Mills, E., Ricken, O., Stutzki, J., Veilleux, S., Walter, F. 2023, ApJ, 958, 109, doi: 10.3847/1538-4357/acff6e.

- [30] "The EDGE-CALIFA Survey: Spatially Resolved ¹³ CO(1-0) Observations and Variations in ¹² CO(1-0)/¹³ CO(1-0) in Nearby Galaxies on Kiloparsec Scales"
 Cao, Y., Wong, T., Bolatto, A. D., Leroy, A. K., Rosolowsky, E., Utomo, D., Sánchez, S. F., Barrera-Ballesteros, J. K., Levy, R. C., Colombo, D., Blitz, L., Vogel, S. N., Puschnig, J., Villanueva, V., Rubio, M. 2023, ApJS, 268, 3, doi: 10.3847/1538-4365/acd840.
- [29] "Fuelling the nuclear ring of NGC 1097"
 Sormani, M. C., Barnes, A. T., Sun, J., Stuber, S. K., Schinnerer, E., Emsellem, E., Leroy, A. K., Glover, S. C. O., Henshaw, J. D., Meidt, S. E., Neumann, J., Querejeta, M., Williams, T. G., Bigiel, F., Eibensteiner, C., Fragkoudi, F., Levy, R. C., Grasha, K., Klessen, R. S., Kruijssen, J. M. D., Neumayer, N., Pinna, F., Rosolowsky, E. W., Smith, R. J., Teng, Y.-H., Tress, R. G., Watkins, E. J. 2023, MNRAS, 523, 2918, doi: 10.1093/mnras/stad1554.
- [28] "CO Excitation in High-z Main-sequence Analogues: Resolved CO(4-3)/CO(3-2) Line Ratios in DYNAMO Galaxies"
 Lenkić, L., Bolatto, A. D., Fisher, D. B., Abraham, R., Glazebrook, K., Herrera-Camus, R., Levy, R. C., Obreschkow, D., Volpert, C. G. 2023, ApJ, 945, 9, doi: 10.3847/1538-4357/acb3b2.
- [27] "PHANGS-JWST First Results: A Global and Moderately Resolved View of Mid-infrared and CO Line Emission from Galaxies at the Start of the JWST Era"
 Leroy, A. K., Bolatto, A. D., Sandstrom, K., Rosolowsky, E., Barnes, A. T., Bigiel, F., Boquien, M., den Brok, J. S., Cao, Y., Chastenet, J., Chevance, M., Chiang, I.-D., Chown, R., Colombo, D., Ellison, S. L., Emsellem, E., Grasha, K., Henshaw, J. D., Hughes, A., Klessen, R. S., Koch, E. W., Kim, J., Kreckel, K., Kruijssen, J. M. D., Larson, K. L., Lee, J. C., Levy, R. C., Lin, L., Liu, D., Meidt, S. E., Pety, J., Querejeta, M., Rubio, M., Saito, T., Salim, S., Schinnerer, E., Sormani, M. C., Sun, J., Thilker, D. A., Usero, A., Vogel, S. N., Watkins, E. J., Whitcomb, C. M., Williams, T. G., Wilson, C. D. 2023, ApJL, 944, L10, doi: 10.3847/2041-8213/acab01.
- [26] "PHANGS-JWST First Results: Mid-infrared Emission Traces Both Gas Column Density and Heating at 100 pc Scales"
 Leroy, A. K., Sandstrom, K., Rosolowsky, E., Belfiore, F., Bolatto, A. D., Cao, Y., Koch, E. W., Schinnerer, E., Barnes, A. T., Bešlić, I., Bigiel, F., Blanc, G. A., Chastenet, J., Chen, N. M., Chevance, M., Chown, R., Congiu, E., Dale, D. A., Egorov, O. V., Emsellem, E., Eibensteiner, C., Faesi, C. M., Glover, S. C. O., Grasha, K., Groves, B., Hassani, H., Henshaw, J. D., Hughes, A., Jiménez-Donaire, M. J., Kim, J., Klessen, R. S., Kreckel, K., Kruijssen, J. M. D., Larson, K. L., Lee, J. C., Levy, R. C., Liu, D., Lopez, L. A., Meidt, S. E., Murphy, E. J., Neumann, J., Pessa, I., Pety, J., Saito, T., Sardone, A., Sun, J., Thilker, D. A., Usero, A., Watkins, E. J., Whitcomb, C. M., Williams, T. G. 2023, ApJL, 944, L9, doi: 10.3847/2041-8213/acaf85.
- [25] "The EDGE-CALIFA survey: The role of spiral arms and bars in driving central molecular gas concentrations"
 Yu, S.-Y., Kalinova, V., Colombo, D., Bolatto, A. D., Wong, T., Levy, R. C., Villanueva, V., Sánchez, S. F., Ho, L. C., Vogel, S. N., Teuben, P., Rubio, M. 2022, A&A, 666, A175, doi: 10.1051/0004-6361/202244306.
- [24] "The Morpho-kinematic Architecture of Super Star Clusters in the Center of NGC 253"
 Levy, R. C., Bolatto, A. D., Leroy, A. K., Sormani, M. C., Emig, K. L., Gorski, M., Lenkić, L., Mills, E. A. C., Tarantino, E., Teuben, P., Veilleux, S., Walter, F. 2022, ApJ, 935, 19, doi: 10.3847/1538-4357/ac7b7a.
- [23] "Cuspy dark matter density profiles in massive dwarf galaxies"

Cooke, L. H., Levy, R. C., Bolatto, A. D., Simon, J. D., Newman, A. B., Teuben, P., Davey, B. D., Wright, M., Tarantino, E., Lenkić, L., Villanueva, V. 2022, MNRAS, 512, 1012, doi: 10.1093/mnras/stac588.

- [22] "ALMA Imaging of a Galactic Molecular Outflow in NGC 4945"
 Bolatto, A. D., Leroy, A. K., Levy, R. C., Meier, D. S., Mills, E. A. C., Thompson, T. A., Emig, K. L., Veilleux, S., Ott, J., Gorski, M., Walter, F., Lopez, L. A., Lenkić, L. 2021, ApJ, 923, 83, doi: 10.3847/1538-4357/ac2c08.
- [21] "The EDGE-CALIFA Survey: The Resolved Star Formation Efficiency and Local Physical Conditions" Villanueva, V., Bolatto, A., Vogel, S., Levy, R. C., Sánchez, S. F., Barrera-Ballesteros, J., Wong, T., Rosolowsky, E., Colombo, D., Rubio, M., Cao, Y., Kalinova, V., Leroy, A., Utomo, D., Herrera-Camus, R., Blitz, L., Luo, Y. 2021, ApJ, 923, 60, doi: 10.3847/1538-4357/ac2b29.
- [20] "Clustered Star Formation in the Center of NGC 253 Contributes to Driving the Ionized Nuclear Wind" Mills, E. A. C., Gorski, M., Emig, K. L., Bolatto, A. D., Levy, R. C., Leroy, A. K., Ginsburg, A., Henshaw, J. D., Zschaechner, L. K., Veilleux, S., Tanaka, K., Meier, D. S., Walter, F., Krieger, N., Ott, J. 2021, ApJ, 919, 105, doi: 10.3847/1538-4357/ac0fe8.
- [19] "NOEMA High-fidelity Imaging of the Molecular Gas in and around M82"
 Krieger, N., Walter, F., Bolatto, A. D., Guillard, P., Lehnert, M., Leroy, A. K., Pety, J., Emig, K. L., Levy, R. C., Krips, M., Rix, H.-W., Salak, D., Weiss, A., Veilleux, S. 2021, ApJL, 915, L3, doi: 10.3847/2041-8213/ac01e9.
- [18] "Characterizing the Multiphase Origin of [C II] Emission in M 101 and NGC 6946 with Velocity-resolved Spectroscopy"
 Tarantino, E., Bolatto, A. D., Herrera-Camus, R., Harris, A. I., Wolfire, M., Buchbender, C., Croxall, K. V., Dale, D. A., Groves, B., Levy, R. C., Riquelme, D., Smith, J. D. T., Stutzki, J. 2021, ApJ, 915, 92, doi: 10.3847/1538-4357/abfcc6.
- [17] "The EDGE-CALIFA survey: self-regulation of star formation at kpc scales"
 Barrera-Ballesteros, J. K., Sánchez, S. F., Heckman, T., Wong, T., Bolatto, A., Ostriker, E., Rosolowsky, E., Carigi, L., Vogel, S., Levy, R. C., Colombo, D., Luo, Y., Cao, Y. 2021, MNRAS, 503, 3643, doi: 10.1093/mnras/stab755.
- [16] "Outflows from Super Star Clusters in the Central Starburst of NGC 253"
 Levy, R. C., Bolatto, A. D., Leroy, A. K., Emig, K. L., Gorski, M., Krieger, N., Lenkić, L., Meier, D. S., Mills, E. A. C., Ott, J., Rosolowsky, E., Tarantino, E., Veilleux, S., Walter, F., Weiß, A., Zwaan, M. A. 2021, ApJ, 912, 4, doi: 10.3847/1538-4357/abec84.
- [15] "The EDGE-CALIFA survey: the local and global relations between Σ**, Σ**, Σ**, and Σ**mol that regulate star formation"
 Sánchez, S. F., Barrera-Ballesteros, J. K., Colombo, D., Wong, T., Bolatto, A., Rosolowsky, E., Vogel, S., Levy, R., Kalinova, V., Alvarez-Hurtado, P., Luo, Y., Cao, Y. 2021, MNRAS, 503, 1615, doi: 10.1093/mnras/stab442.
- [14] "The EDGE-CALIFA survey: exploring the role of molecular gas on galaxy star formation quenching" Colombo, D., Sanchez, S. F., Bolatto, A. D., Kalinova, V., Weiß, A., Wong, T., Rosolowsky, E., Vogel, S. N., Barrera-Ballesteros, J., Dannerbauer, H., Cao, Y., Levy, R. C., Utomo, D., Blitz, L. 2020, A&A, 644, A97, doi: 10.1051/0004-6361/202039005.
- [13] "Super Star Clusters in the Central Starburst of NGC 4945"
 Emig, K. L., Bolatto, A. D., Leroy, A. K., Mills, E. A. C., Jiménez Donaire, M. J., Tielens, A. G. G. M., Ginsburg, A., Gorski, M., Krieger, N., Levy, R. C., Meier, D. S., Ott, J., Rosolowsky, E., Thompson, T. A., Veilleux, S. 2020, ApJ, 903, 50, doi: 10.3847/1538-4357/abb67d.

[12] "The Turbulent Gas Structure in the Centers of NGC 253 and the Milky Way"
Krieger, N., Bolatto, A. D., Koch, E. W., Leroy, A. K., Rosolowsky, E., Walter, F., Weiß, A., Eden, D. J., Levy, R. C., Meier, D. S., Mills, E. A. C., Moore, T., Ott, J., Su, Y., Veilleux, S. 2020, ApJ, 899, 158, doi: 10.3847/1538-4357/aba903.

- [11] "The Molecular Interstellar Medium in the Super Star Clusters of the Starburst NGC 253"
 Krieger, N., Bolatto, A. D., Leroy, A. K., Levy, R. C., Mills, E. A. C., Meier, D. S., Ott, J., Veilleux, S., Walter, F., Weiß, A. 2020, ApJ, 897, 176, doi: 10.3847/1538-4357/ab9c23.
- [10] "The EDGE-CALIFA survey: using optical extinction to probe the spatially resolved distribution of gas in nearby galaxies"
 Barrera-Ballesteros, J. K., Utomo, D., Bolatto, A. D., Sánchez, S. F., Vogel, S. N., Wong, T., Levy, R. C., Colombo, D., Kalinova, V., Teuben, P., García-Benito, R., Husemann, B., Mast, D., Blitz, L. 2020, MNRAS, 492, 2651, doi: 10.1093/mnras/stz3553.
- [9] "The EDGE-CALIFA Survey: Evidence for Pervasive Extraplanar Diffuse Ionized Gas in Nearby Edge-on Galaxies"
 Levy, R. C., Bolatto, A. D., Sánchez, S. F., Blitz, L., Colombo, D., Kalinova, V., López-Cobá, C., Ostriker, E. C., Teuben, P., Utomo, D., Vogel, S. N., Wong, T. 2019, ApJ, 882, 84, doi: 10.3847/1538-4357/ab2ed4.
- [8] "The Molecular Outflow in NGC 253 at a Resolution of Two Parsecs"
 Krieger, N., Bolatto, A. D., Walter, F., Leroy, A. K., Zschaechner, L. K., Meier, D. S., Ott, J., Weiss, A., Mills, E. A. C., Levy, R. C., Veilleux, S., Gorski, M. 2019, ApJ, 881, 43, doi: 10.3847/1538-4357/ab2d9c.
- [7] "Forming Super Star Clusters in the Central Starburst of NGC 253"
 Leroy, A. K., Bolatto, A. D., Ostriker, E. C., Walter, F., Gorski, M., Ginsburg, A., Krieger, N., Levy,
 R. C., Meier, D. S., Mills, E., Ott, J., Rosolowsky, E., Thompson, T. A., Veilleux, S., Zschaechner,
 L. K. 2018, ApJ, 869, 126, doi: 10.3847/1538-4357/aaecd1.
- [6] "The EDGE-CALIFA survey: validating stellar dynamical mass models with CO kinematics" Leung, G. Y. C., Leaman, R., van de Ven, G., Lyubenova, M., Zhu, L., Bolatto, A. D., Falcón-Barroso, J., Blitz, L., Dannerbauer, H., Fisher, D. B., Levy, R. C., Sanchez, S. F., Utomo, D., Vogel, S., Wong, T., Ziegler, B. 2018, MNRAS, 477, 254, doi: 10.1093/mnras/sty288.
- [5] "The EDGE-CALIFA Survey: Molecular and Ionized Gas Kinematics in Nearby Galaxies"
 Levy, R. C., Bolatto, A. D., Teuben, P., Sánchez, S. F., Barrera-Ballesteros, J. K., Blitz, L., Colombo, D., García-Benito, R., Herrera-Camus, R., Husemann, B., Kalinova, V., Lan, T., Leung, G. Y. C., Mast, D., Utomo, D., van de Ven, G., Vogel, S. N., Wong, T. 2018, ApJ, 860, 92, doi: 10.3847/1538-4357/aac2e5.
- [4] "The EDGE-CALIFA survey: the influence of galactic rotation on the molecular depletion time across the Hubble sequence"
 Colombo, D., Kalinova, V., Utomo, D., Rosolowsky, E., Bolatto, A. D., Levy, R. C., Wong, T., Sanchez, S. F., Leroy, A. K., Ostriker, E., Blitz, L., Vogel, S., Mast, D., García-Benito, R., Husemann, B., Dannerbauer, H., Ellmeier, L., Cao, Y. 2018, MNRAS, 475, 1791, doi: 10.1093/mnras/stx3233.
- [3] "The EDGE-CALIFA Survey: Variations in the Molecular Gas Depletion Time in Local Galaxies" Utomo, D., Bolatto, A. D., Wong, T., Ostriker, E. C., Blitz, L., Sanchez, S. F., Colombo, D., Leroy, A. K., Cao, Y., Dannerbauer, H., Garcia-Benito, R., Husemann, B., Kalinova, V., Levy, R. C., Mast, D., Rosolowsky, E., Vogel, S. N. 2017, ApJ, 849, 26, doi: 10.3847/1538-4357/aa88c0.
- [2] "The EDGE-CALIFA Survey: Interferometric Observations of 126 Galaxies with CARMA"
 Bolatto, A. D., Wong, T., Utomo, D., Blitz, L., Vogel, S. N., Sánchez, S. F., Barrera-Ballesteros,

J., Cao, Y., Colombo, D., Dannerbauer, H., García-Benito, R., Herrera-Camus, R., Husemann, B., Kalinova, V., Leroy, A. K., Leung, G., **Levy, R. C.**, Mast, D., Ostriker, E., Rosolowsky, E., Sandstrom, K. M., Teuben, P., van de Ven, G., Walter, F. 2017, ApJ, 846, 159, doi: 10.3847/1538-4357/aa86aa.

"Dense Molecular Gas Tracers in the Outflow of the Starburst Galaxy NGC 253"
 Walter, F., Bolatto, A. D., Leroy, A. K., Veilleux, S., Warren, S. R., Hodge, J., Levy, R. C., Meier, D. S., Ostriker, E. C., Ott, J., Rosolowsky, E., Scoville, N., Weiss, A., Zschaechner, L., Zwaan, M. 2017, ApJ, 835, 265, doi: 10.3847/1538-4357/835/2/265.