Dr. Adam G. Ginsburg
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Educational Background:

- 2013 PhD Astrophysics University of Colorado, Boulder
- 2009 M.S. Astrophysics University of Colorado, Boulder
- 2006 B.S. Astrophysics Rice University

Professional Employment:

• 2013 - present	Fellow	European Southern Observatory Garching, Germany
• 2007 - 2013	Graduate Research Assistant	Center for Astrophysics and Space Astronomy, University of Colorado, Boulder, CO
• 2010 - 2013	Instructor	Department of Astrophysical and Planetary Sciences, University of Colorado, Boulder, CO
• 2007 - 2011	Teaching Assistant	Department of Astrophysical and Planetary Sciences, University of Colorado, Boulder, CO
• 2007	Research Assistant	Department of Physics and Astronomy, University of Denver, Denver, CO

Areas of Research:

- The astrophysics of massive star formation, with a focus on observations of proto-cluster clumps and massive outflows
- The physical properties of the molecular interstellar medium, supersonic turbulence, and formaldehyde (H_2CO) as a probe of local physical conditions.
- Observing with single-dish heterodyne and continuum millimeter instruments, single dish and synthesis array radio imaging, and optical and near infrared imaging and spectroscopy.
- The development of software tools for the analysis and visualization of diffuse and extended emission, spectral data cubes, and large astromical data sets.

Honors/Awards:

- 2013 European Southern Observatory Postdoctoral Fellowship
- 2011 University of Colorado Chance Irick Cooke Fellowship for Excellence in Research
- 2010 NRAO Green Bank Student Observing Support
- 2010 NSF GRFP Honorable Mention
- 2009 NSF GRFP Honorable Mention
- 2008 NSF GRFP Honorable Mention
- 2008 NRAO Photo Contest First Prize
- 2008 University of Colorado Astrophysical and Planetary Sciences Excellence in Teaching award
- 2006 National Radio Astronomy Observatory - summer REU with David Meiers

Academic Advising:

Student	Date	Program	Project
Anna Faye McLeod	Fall 2013 - present	Ludwig-Maximilian University / ESO PhD Thesis Student	FUSION: Comparison of hydrodynamic simulations and observations in nearby high mass star forming regions
Simon Liedtke	Summer 2014	Google Summer of Code	New tools for `astroquery`: XMatch, SkyView, Atomic Line List
Madhura Parikh	Summer 2013	Google Summer of Code	A coherent API for `astroquery`, a python web database query toolkit

Teaching:

	Date	Course
•	Spring 2013	Instructor of ASTR 2600: Introduction to Programming for Astronomers (in IDL)
•	Fall 2012	Instructor of ASTR 2600: Introduction to Programming for Astronomers (in IDL)
•	Summer 2010	Co-Instructor of ASTR 1020: Stars and Galaxies
•	Fall 2011	Co-Instructor of ASTR 6000: Graduate Seminar on the Interstellar Medium
•	Fall 2011	Teaching Assistant for ASTR 3510: Astronomical Observing (imaging)
•	Spring 2010	Teaching Assistant for ASTR 3520: Astronomical Observing (spectroscopy)
•	Fall 2009	Teaching Assistant for ASTR 3510: Astronomical Observing (imaging)
•	Fall 2008	Teaching Assistant for ASTR 3520: Astronomical Observing (spectroscopy)
•	Spring 2008	Teaching Assistant for ASTR 3510: Astronomical Observing (imaging)
•	Fall 2007	Teaching Assistant for ASTR 3520: Astronomical Observing (spectroscopy)

Conferences and Workshops hosted:

Date	Meeting Name	Role
2016	Lorentz Center workshop "Apples-to-Apples": Comparing simulations & observations	Co-organizer
2015	ESO Central Molecular Zone workshop (2 days)	Organizer
2015	Florence Simulation-Observation Workshop (5 days)	Organizer
2014	Workshop on the APEX CMZ 1 mm survey at MPIfR Bonn (1 day)	Organizer

Conferences and Workshops attended:

Date	Meeting Name	Role	Talk or Poster Title
2015	The 6th Zermatt ISM Symposium	Talk	Dense gas in the Central Molecular Zone is warm and heated by turbulence
2015	Astropy Lorentz Center Workshop (5 days)	Talks & unconferences	radio-astro-tools, astroquery, and spectral-cube
2015	University of Munich Filaments Workshop (3 days)	Talk	W51: The most active star-forming complex in the Galaxy
2015	Soul of High Mass Star Formation, Chile	Talk	The Density Structure of the W51 GMC
2014	ALMA Arc Node Retreat	Talk	ALMA's first look at the extended Sgr B2 Cloud
2014	Sexten Workshop: The Formation of Globular Clusters	Talk	The Galactic population of young massive clusters
2014	Sexten Workshop: The assembly of massive clusters	Talk	The density of W51 and its protoclusters
2014	Early Phase of Star Formation (EPoS 6)	Talk	The density structure of The Brick
2014	Early Phase of Star Formation (EPoS 6)	Poster	The density structure of the W51 Giant Molecular Cloud
2013	ISM Physical Processes in Garching	Poster	A measurement of the turbulence driving parameter
2013	.Astronomy 5	Talk	Astroquery: A toolkit for remote data access in python
2013	AAS 221	Thesis Talk	Surveying massive star formation in the Galactic Plane
2012	Galactic Scale Star Formation	Poster	There are no starless massive proto-clusters in the first quadrant
2012	Labyrinth of Star Formation	Talk	Surveying Pre-Stellar Gas with the BGPS (with an emphasis on what we don't see)
2011	Milky Way	Talk	The Bolocam Galactic Plane Survey
2010	Stars to Galaxies	Poster	Star Formation in Perseus Arm Complexes
2010	AAS 217	Poster	Formaldehyde Densitometry of Dust Clumps: The shapes and densities of massive star forming regions
2009	AAS 215	Poster	The Bolocam Galactic Plane Survey: Data, Early Results, and Future Directions

Major telescope time allocations as PI:

Telescope	Title	Time	Status
ALMA 2015	Cycle 3: 2015.1.00262.S: Digging for rusty bullets at an explosion site	1.9 hours	Approved
GBT 2015	GBT/15B-129: Measuring the gas density along the CMZ dust ridge	13.5 hours	Approved
ATCA 2015	C3045: Geometry of clouds and HII regions in the CMZ using H2CO	84 hours	Observed (2015), published 1510.06401
VLA 2014	VLA15A-164: Studying turbulence through the atomic-to-molecular transition	3.3 hours	Observed
GBT 2014	GBT14A-329: MUSTANG Galactic Plane survey: HCHIIs in the brightest massive proto-clusters	14 hours	Approved
ALMA 2014	Cycle 2: 2013.1.00308.S: Gas temperature and kinematics as key inputs for star formation theory: Cores and turbulence in the massive protocluster W51	2.4 hours	Observed (2015)
ALMA 2014	Cycle 2: 2013.1.00269.S: Sgr B2 - The Proving Ground for Star Formation Theories	6 hours	Observed (2015)
LOFAR 2014	Cycle 2: LC2_006: A search for p-H2CO, a potential EoR contaminant, toward the Galactic Center, W43, W44, W49, and M82.	8 hours	Observed (2014)
APEX 2014	H2CO Thermometry of the CMZ to understand its low star formation rate	250 hours	Published: arXiv:1509.01583
GBT 2014	GBT14A-110/GBT12B-221: Density Measurements in G0.253+0.016: Pilot program for CMZ H2CO densitometry	18 hours	Observed (2014)
KPNO 2013	2013A-0399: Star formation in the Central Molecular Zone: Massive Outflows in Sgr C	6 hours	Observed (2013)
EVLA 2013	13A/064: Massive stars and ionized gas in the W51 complex	13 hours, 4 configs	Observed (2014)
Arecibo 2012	A2854: Density Map of the W51 Giant Molecular Cloud complex	13 hours	Published 2015A&A...573A.106G
GBT 2010	GBT10B-019: Densitometry of young star-forming complexes throughout the Galaxy	120 hours	Published: 2013ApJ...779...50G
Arecibo 2010	A2584: Densitometry of young star-forming complexes throughout the Galaxy	60 hours	Published: 2013ApJ...779...50G
GBT 2009	GBT09C-049: Measuring the dense gas mass fraction with H2CO absorption	4 hours	Published: 2011ApJ...736..149G

Other relevant observing:

I was an active user of the Apache Point Observatory (APO) while at the University of Colorado, using a few dozen nights of TripleSpec, NICFPS, and DIS time to examine outflows in Sh 2-233 (IRAS 05358+3543), W5, Orion BN/KL, W51, and Sgr C.

I am Co-I on successful proposals to the VLT, Gemini, SOFIA, HST, ALMA, IRAM 30m, HHT/SMT, APEX, Herschel, GBT, VLA, and Arecibo. Please ask me if you would like the complete detailed list.

Software:

I am an active developer of a large variety of astronomical python software tools and a contributor to `astropy` and its affiliates. My github profile (`github.com/keflavich`) contains a complete list of projects. Below is a selection of my most popular packages:

- `astroquery` (`astroquery.readthedocs.org`): a toolkit for querying internet-hosted astronomical databases.
- `pyspeckit` (`pyspeckit.bitbucket.org`): a software suite for visualizing and analyzing spectral line and spectral cube data
- `spectral-cube` (`spectral-cube.rtfd.org`): a library for the manipulation of radio spectral cube data
- `pyradex` (`github.com/keflavich/pyradex`): an object-oriented frontend to the popular RADEX radiative transfer code and its peers.
- `image-registration` (`github.com/keflavich/image_registration`): a package designed to determine and correct the offsets between images containing only diffuse emission
- `FITS-tools` (`github.com/keflavich/FITS_tools`): a collection of tools for slicing and reprojecting FITS images and cubes

Service:

- Organizer of the "Python Coffee and Tutorial" series at ESO, 2014-2015
- Referee for the following journals:
  - *Science*
  - *Nature*
  - *Astrophysical Journal*
  - *Astronomy & Astrophysics*
  - *Monthly Notices of the Royal Astronomical Society*
  - *Revista Mexicana de Astronomía y Astrofísica*
- Panel chair for a recent NASA grant review panel
- ESO ALMA Fellow Duties as part of the European ALMA Regional Center. Primary duties include software development, maintenance of the Quality Assurance Packager software, and regression testing
- Co-organizer of the December 2014 ALMA Postdoc Symposium in Tokyo
- Member of the `montage` (`montage.ipac.caltech.edu`) Image Mosaic Engine users group
- (former) Member of the CCAT ISM working group
- Member of the Next-Generation VLA (NGVLA) high mass star formation working group
- Member of the SKA Galactic Science working group

Additional Training:

- ESO Fellows Development Program: MBTI (October 8, 2015)
- ESO Fellows Development Program: People Skills (June 18, 2015)
- ESO Fellows Development Program: Networking (February 17, 2015)
- ESO Fellows Development Program: Presentation Skills (July 3, 2014)
- ESO Fellows Development Program: Scientific Writing (March 4, 2014)
- ESO Fellows Development Program: Project Management (January 28, 2014)

Research Overview

I study the formation of massive stars and massive clusters. Massive stars are responsible for enriching the interstellar medium with heavy elements in the early universe. They produce most of the light and energy in the universe. The locations where these largest stars form are important: when many massive stars spawn in the same place, their collective feedback - radiation, winds, and eventual explosions - is far greater than the sum of the individual components. Clustered star formation is therefore an essential ingredient in understanding the formation of both stars and galaxies.

I aim to understand how the gas structure in molecular clouds governs the formation of the most powerful massive clusters and the future evolution of those clouds. We know that molecular clouds are supersonically turbulent, so I work to understand how that turbulence affects both the formation of clusters and how we perceive their parent clouds.

I use primarily submillimeter, millimeter, and radio telescopes to identify and examine physical conditions. I use different transitions of molecular lines, especially formaldehyde (H2CO) and carbon monoxide (CO), to determine the density, temperature, and kinematics of gas in the interstellar medium. Much of my effort is on using radiative transfer modeling to turn relatively inexpensive observations into important physical constraints on gas properties.

In order to make this research possible, I actively develop and distribute software for the analysis of spectral data, molecular lines, dust continuum data, and statistical distributions.

Publications:

[1] Colombo, D., Rosolowsky, E., **Ginsburg**, A., Duarte-Cabral, A., & Hughes, A., *Graph-based interpretation of the molecular interstellar medium segmentation*, Oct, 2015

[2] **Ginsburg**, A., Walsh, A., Henkel, C., Jones, P. A., Cunningham, M., Kauffmann, J., Pillai, T., Mills, E. A. C., Ott, J., Kruijssen, J. M. D., Menten, K. M., Battersby, C., Rathborne, J., Contreras, Y., Longmore, S., Walker, D., & Dawson, J., *High-mass star-forming cloud g0.38+0.04 in the galactic center dust ridge contains h2co and sio masers*, Oct, 2015

[3] **Ginsburg**, A., Henkel, C., Ao, Y., Riquelme, D., Kauffmann, J., Pillai, T., Mills, E. A. C., Requena-Torres, M. A., Immer, K., Testi, L., Ott, J., Bally, J., Battersby, C., Darling, J., Aalto, S., Stanke, T., Kendrew, S., Kruijssen, J. M. D., Longmore, S., Dale, J., Guesten, R., & Menten, K. M., *Dense gas in the galactic central molecular zone is warm and heated by turbulence*, Sep, 2015

[4] **ALMA Partnership**, Fomalont, E. B., Vlahakis, C., Corder, S., Remijan, A., Barkats, D., Lucas, R., Hunter, T. R., Brogan, C. L., Asaki, Y., & et al., *The 2014 ALMA Long Baseline Campaign: An Overview*, July, 2015, ApJ, 808, L1

[5] Wang, K., Testi, L., **Ginsburg**, A., Walmsley, C. M., Molinari, S., & Schisano, E., *Large-scale filaments associated with Milky Way spiral arms*, July, 2015, MNRAS, 450, 4043

[6] Ellsworth-Bowers, T. P., Glenn, J., Riley, A., Rosolowsky, E., **Ginsburg**, A., Evans, II, N. J., Bally, J., Battersby, C., Shirley, Y. L., & Merello, M., *The Bolocam Galactic Plane Survey. XIII. Physical Properties and Mass Functions of Dense Molecular Cloud Structures*, June, 2015, ApJ, 805, 157

[7] McLeod, A. F., Dale, J. E., **Ginsburg**, A., Ercolano, B., Gritschneder, M., Ramsay, S., & Testi, L., *The Pillars of Creation revisited with MUSE: gas kinematics and high-mass stellar feedback traced by optical spectroscopy*, June, 2015, MNRAS, 450, 1057

[8] Merello, M., Evans, II, N. J., Shirley, Y. L., Rosolowsky, E., **Ginsburg**, A., Bally, J., Battersby, C., & Dunham, M. M., *The Bolocam Galactic Plane Survey. XI. Temperatures and Substructure of Galactic Clumps Based On 350 μM Observations*, May, 2015, ApJS, 218, 1

[9] Bally, J., **Ginsburg**, A., Silvia, D., & Youngblood, A., *The Orion Fingers: Near-IR Adaptive Optics Imaging of an Explosive Protostellar Outflow*, February, 2015, A&A

[10] Ellsworth-Bowers, T. P., Rosolowsky, E., Glenn, J., **Ginsburg**, A., Evans, II, N. J., Battersby, C., Shirley, Y. L., & Svoboda, B., *The Bolocam Galactic Plane Survey. XII. Distance Catalog Expansion Using Kinematic Isolation of Dense Molecular Cloud Structures with ^{13}CO(1-0)*, January, 2015, ApJ, 799, 29

[11] **Ginsburg**, A., Bally, J., Battersby, C., Youngblood, A., Darling, J., Rosolowsky, E., Arce, H., & Lebrón Santos, M. E., *The dense gas mass fraction in the W51 cloud and its protoclusters*, January, 2015, A&A, 573, A106

[12] Bally, J., Rathborne, J. M., Longmore, S. N., Jackson, J. M., Alves, J. F., Bressert, E., Contreras, Y., Foster, J. B., Garay, G., Ginsburg, A., Johnston, K. G., Kruijssen, J. M. D., Testi, L., & Walsh, A. J., *Absorption Filaments toward the Massive Clump G0.253+0.016*, November, 2014, ApJ, 795, 28

[13] Bally, J., **Ginsburg**, A., Probst, R., Reipurth, B., Shirley, Y. L., & Stringfellow, G. S., *Outflows, Dusty Cores, and a Burst of Star Formation in the North America and Pelican Nebulae*, September, 2014, ApJ accepted

[14] Battersby, C., **Ginsburg**, A., Bally, J., Longmore, S., Dunham, M., & Darling, J., *The Onset of Massive Star Formation: The Evolution of Temperature and Density Structure in an Infrared Dark Cloud*, June, 2014, ApJ, 787, 113

[15] Battersby, C., Bally, J., Dunham, M., **Ginsburg**, A., Longmore, S., & Darling, J., *The Comparison of Physical Properties Derived from Gas and Dust in a Massive Star-forming Region*, May, 2014, ApJ, 786, 116

[16] Levesque, E. M., Stringfellow, G. S., **Ginsburg**, A. G., Bally, J., & Keeney, B. A., *The Peculiar Balmer Decrement of SN 2009ip: Constraints on Circumstellar Geometry*, January, 2014, AJ, 147, 23

[17] Margutti, R., Milisavljevic, D., Soderberg, A. M., Chornock, R., Zauderer, B. A., Murase, K., Guidorzi, C., Sanders, N. E., Kuin, P., Fransson, C., Levesque, E. M., Chandra, P., Berger, E., Bianco, F. B., Brown, P. J., Challis, P., Chatzopoulos, E., Cheung, C. C., Choi, C., Chomiuk, L., Chugai, N., Contreras, C., Drout, M. R., Fesen, R., Foley, R. J., Fong, W., Friedman, A. S., Gall, C., Gehrels, N., Hjorth, J., Hsiao, E., Kirshner, R., Im, M., Leloudas, G., Lunnan, R., Marion, G. H., Martin, J., Morrell, N., Neugent, K. F., Omodei, N., Phillips, M. M., Rest, A., Silverman, J. M., Strader, J., Stritzinger, M. D., Szalai, T., Utterback, N. B., Vinko, J., Wheeler, J. C., Arnett, D., Campana, S., Chevalier, R., **Ginsburg**, A., Kamble, A., Roming, P. W. A., Pritchard, T., & Stringfellow, G., *A Panchromatic View of the Restless SN 2009ip Reveals the Explosive Ejection of a Massive Star Envelope*, January, 2014, ApJ, 780, 21

[18] **Ginsburg**, A., Federrath, C., & Darling, J., *A Measurement of the Turbulence-driven Density Distribution in a Non-star-forming Molecular Cloud*, December, 2013, ApJ, 779, 50

[19] Shirley, Y. L., Ellsworth-Bowers, T. P., Svoboda, B., Schlingman, W. M., **Ginsburg**, A., Rosolowsky, E., Gerner, T., Mairs, S., Battersby, C., Stringfellow, G., Dunham, M. K., Glenn, J., & Bally, J., *The Bolocam Galactic Plane Survey. X. A Complete Spectroscopic Catalog of Dense Molecular Gas Observed toward 1.1 mm Dust Continuum Sources with* $7.5 \leq l \leq 194$, November, 2013, ApJS, 209, 2

[20] Astropy Collaboration, Robitaille, T. P., Tollerud, E. J., Greenfield, P., Droettboom, M., Bray, E., Aldcroft, T., Davis, M., **Ginsburg**, A., Price-Whelan, A. M., Kerzendorf, W. E., Conley, A., Crighton, N., Barbary, K., Muna, D., Ferguson, H., Grollier, F., Parikh, M. M., Nair, P. H., Unther, H. M., Deil, C., Woillez, J., Conseil, S., Kramer, R., Turner, J. E. H., Singer, L., Fox, R., Weaver, B. A., Zabalza, V., Edwards, Z. I., Azalee Bostroem, K., Burke, D. J., Casey, A. R., Crawford, S. M., Dencheva, N., Ely, J., Jenness, T., Labrie, K., Lim, P. L., Pierfederici, F., Pontzen, A., Ptak, A., Refsdal, B., Servillat, M., & Streicher, O., *Astropy: A community Python package for astronomy*, October, 2013, A&A, 558, A33

[21] **Ginsburg**, A., Glenn, J., Rosolowsky, E., Ellsworth-Bowers, T. P., Battersby, C., Dunham, M., Merello, M., Shirley, Y., Bally, J., Evans, II, N. J., Stringfellow, G., & Aguirre, J., *The Bolocam Galactic Plane Survey. IX. Data Release 2 and Outer Galaxy Extension*, October, 2013, ApJS, 208, 14

[22] Kendrew, S., **Ginsburg**, A., Johnston, K., Beuther, H., Bally, J., Cyganowski, C. J., & Battersby, C., *Early-stage Massive Star Formation near the Galactic Center: Sgr C*, October, 2013, ApJ, 775, L50

[23] Fallscheer, C., Reid, M. A., Di Francesco, J., Martin, P. G., Hill, T., Hennemann, M., Nguyen-Luong, Q., Motte, F., Men'shchikov, A., André, P., Ward-Thompson, D., Griffin, M., Kirk, J., Konyves, V., Rygl, K. L. J., Sadavoy, S., Sauvage, M., Schneider, N., Anderson, L. D., Benedettini, M., Bernard, J.-P., Bontemps, S., **Ginsburg**, A., Molinari, S., Polychroni, D., Rivera-Ingraham, A., Roussel, H., Testi, L., White, G., Williams, J. P., Wilson, C. D., Wong, M., & Zavagno, A., *Herschel Reveals Massive Cold Clumps in NGC 7538*, August, 2013, ApJ, 773, 102

[24] Ellsworth-Bowers, T. P., Glenn, J., Rosolowsky, E., Mairs, S., Evans, II, N. J., Battersby, C., **Ginsburg**, A., Shirley, Y. L., & Bally, J., *The Bolocam Galactic Plane Survey. VIII. A Mid-infrared Kinematic Distance Discrimination Method*, June, 2013, ApJ, 770, 39

[25] Harvey, P. M., Fallscheer, C., **Ginsburg**, A., Terebey, S., André, P., Bourke, T. L., Di Francesco, J., Könyves, V., Matthews, B. C., & Peterson, D. E., *A First Look at the Auriga-California Giant Molecular Cloud with Herschel and the CSO: Census of the Young Stellar Objects and the Dense Gas*, February, 2013, ApJ, 764, 133

[26] Smith, N., Arnett, W. D., Bally, J., **Ginsburg**, A., & Filippenko, A. V., *The ring nebula around the blue supergiant SBW1: pre-explosion snapshot of an SN 1987A twin*, February, 2013, MNRAS, 429, 1324

[27] Bressert, E., **Ginsburg**, A., Bally, J., Battersby, C., Longmore, S., & Testi, L., *How to Find Young Massive Cluster Progenitors*, October, 2012, ApJ, 758, L28

[28] **Ginsburg**, A., Bressert, E., Bally, J., & Battersby, C., *There are No Starless Massive Proto-clusters in the First Quadrant of the Galaxy*, October, 2012, ApJ, 758, L29

[29] Bally, J., Youngblood, A., & **Ginsburg**, A., *The Spindle: An Irradiated Disk and Bent Protostellar Jet in Orion*, September, 2012, ApJ, 756, 137

[30] **Ginsburg**, A., Bally, J., & Williams, J. P., *JCMT HARP CO 3-2 observations of molecular outflows in W5*, December, 2011, MNRAS, 418, 2121

[31] Battersby, C., Bally, J., **Ginsburg**, A., Bernard, J.-P., Brunt, C., Fuller, G. A., Martin, P., Molinari, S., Mottram, J., Peretto, N., Testi, L., & Thompson, M. A., *Characterizing precursors to stellar clusters with Herschel*, November, 2011, A&A, 535, A128

[32] **Ginsburg**, A., Darling, J., Battersby, C., Zeiger, B., & Bally, J., *Galactic* H_2CO *Densitometry. I. Pilot Survey of Ultracompact H II Regions and Methodology*, August, 2011, ApJ, 736, 149

[33] Schlingman, W. M., Shirley, Y. L., Schenk, D. E., Rosolowsky, E., Bally, J., Battersby, C., Dunham, M. K., Ellsworth-Bowers, T. P., Evans, II, N. J., **Ginsburg**, A., & Stringfellow, G., *The Bolocam Galactic Plane Survey: V.* HCO^+ *and* N_2H^+ *Spectroscopy of 1.1 mm Dust Continuum Sources*, August, 2011, ApJS, 195, 14

[34] van Aarle, E., van Winckel, H., Lloyd Evans, T., Ueta, T., Wood, P. R., & **Ginsburg**, A. G., *The optically bright post-AGB population of the LMC*, June, 2011, A&A, 530, A90+

[35] Aguirre, J. E., **Ginsburg**, A. G., Dunham, M. K., Drosback, M. M., Bally, J., Battersby, C., Bradley, E. T., Cyganowski, C., Dowell, D., Evans, II, N. J., Glenn, J., Harvey, P., Rosolowsky, E., Stringfellow, G. S., Walawender, J., & Williams, J. P., *The Bolocam Galactic Plane Survey: Survey Description and Data Reduction*, January, 2011, ApJS, 192, 4

[36] Bally, J., Aguirre, J., Battersby, C., Bradley, E. T., Cyganowski, C., Dowell, D., Drosback, M., Dunham, M. K., Evans, II, N. J., **Ginsburg**, A., Glenn, J., Harvey, P., Mills, E., Merello, M., Rosolowsky, E., Schlingman, W., Shirley, Y. L., Stringfellow, G. S., Walawender, J., & Williams, J., *The Bolocam Galactic Plane Survey:* $\lambda = 1.1$ *and 0.35 mm Dust Continuum Emission in the Galactic Center Region*, September, 2010, ApJ, 721, 137

[37] Battersby, C., Bally, J., Jackson, J. M., **Ginsburg**, A., Shirley, Y. L., Schlingman, W., & Glenn, J., *An Infrared Through Radio Study of the Properties and Evolution of IRDC Clumps*, September, 2010, ApJ, 721, 222

[38] Yan, C.-H., Minh, Y. C., Wang, S.-Y., Su, Y.-N., & **Ginsburg**, A., *Star-forming Region Sh 2-233IR. I. Deep Near-infrared Observations toward the Embedded Stellar Clusters*, September, 2010, ApJ, 720, 1

[39] Bally, J., Anderson, L. D., Battersby, C., Calzoletti, L., Digiorgio, A. M., Faustini, F., **Ginsburg**, A., Li, J. Z., Nguyen-Luong, Q., Molinari, S., Motte, F., Pestalozzi, M., Plume, R., Rodon, J., Schilke, P., Schlingman, W., Schneider-Bontemps, N., Shirley, Y., Stringfellow, G. S., Testi, L., Traficante, A., Veneziani, M., & Zavagno, A., *Herschel observations of the W43 "mini-starburst"*, July, 2010, A&A, 518, L90+

[40] Dunham, M. K., Rosolowsky, E., Evans, II, N. J., Cyganowski, C. J., Aguirre, J., Bally, J., Battersby, C., Bradley, E. T., Dowell, D., Drosback, M., **Ginsburg**, A., Glenn, J., Harvey, P., Merello, M., Schlingman, W., Shirley, Y. L., Stringfellow, G. S., Walawender, J., & Williams, J. P., *The Bolocam Galactic Plane Survey: III. Characterizing Physical Properties of Massive Star-forming Regions in the Gemini OB1 Molecular Cloud*, July, 2010, ApJ, 717, 1157

[41] Rosolowsky, E., Dunham, M. K., **Ginsburg**, A., Bradley, E. T., Aguirre, J., Bally, J., Battersby, C., Cyganowski, C., Dowell, D., Drosback, M., Evans, II, N. J., Glenn, J., Harvey, P., Stringfellow, G. S., Walawender, J., & Williams, J. P., *The Bolocam Galactic Plane Survey: II. Catalog of the Image Data*, May, 2010, ApJS, 188, 123

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