

PROF. CARA BATTERSBY

PUBLICATIONS

Summary: Cara Battersby has an h-index of 36, is an author on 79 refereed publications with a total citation count of 4,508 (computed May 2022 from the NASA Astrophysics Data Service Page). Complete publication list is below.

First and Second Author or Advised Student Lead

- [1] Hatchfield, H. P., Sormani, M. C., Tress, R. G., **Battersby, Cara**, Smith, R. J., Glover, S. C. O., & Klessen, R. S., *Dynamically Driven Inflow onto the Galactic Center and its Effect upon Molecular Clouds*, November. 2021, ApJ, 922, 79 [\[ADS\]](#)
- [2] Hatchfield, H. P., **Battersby, Cara**, Keto, E., Walker, D., Barnes, A., Callanan, D., Ginsburg, A., Henshaw, J. D., Kauffmann, J., Kruijssen, J. M. D., Longmore, S. N., Lu, X., Mills, E. A. C., Pillai, T., Zhang, Q., Bally, J., Butterfield, N., Contreras, Y. A., Ho, L. C., Ott, J., Patel, N., & Tolls, V., *CMZoom. II. Catalog of Compact Submillimeter Dust Continuum Sources in the Milky Way's Central Molecular Zone*, November. 2020, ApJS, 251, 14 [\[ADS\]](#)
- [3] **Battersby, C.**, Keto, E., Walker, D., Barnes, A., Callanan, D., Ginsburg, A., Hatchfield, H. P., Henshaw, J., Kauffmann, J., Kruijssen, J. M. D., Longmore, S. N., Lu, X., Mills, E. A. C., Pillai, T., Zhang, Q., Bally, J., Butterfield, N., Contreras, Y. A., Ho, L. C., Ott, J., Patel, N., & Tolls, V., *CMZoom: Survey Overview and First Data Release*, August. 2020, ApJS, 249, 35 [\[ADS\]](#)
- [4] Zucker, C., **Battersby, Cara**, & Goodman, A., *Physical Properties of Large-scale Galactic Filaments*, September. 2018, ApJ, 864, 153 [\[ADS\]](#)
- [5] **Battersby, Cara**, Armus, L., Bergin, E., Kataria, T., Meixner, M., Pope, A., Stevenson, K. B., Cooray, A., Leisawitz, D., Scott, D., Bauer, J., Bradford, C. M., Ennico, K., Fortney, J. J., Kaltenegger, L., Melnick, G. J., Milam, S. N., Narayanan, D., Padgett, D., Pontoppidan, K., Roellig, T., Sandstrom, K., Su, K. Y. L., Vieira, J., Wright, E., Zmuidzinas, J., Staguhn, J., Sheth, K., Benford, D., Mamajek, E. E., Neff, S. G., Carey, S., Burgarella, D., De Beck, E., Gerin, M., Helmich, F. P., Moseley, S. H., Sakon, I., & Wiedner, M. C., *The Origins Space Telescope*, August. 2018, Nature Astronomy, 2, 596 [\[ADS\]](#)
- [6] **Battersby, C.**, Bally, J., & Svoboda, B., *The Lifetimes of Phases in High-mass Star-forming Regions*, February. 2017, ApJ, 835, 263 [\[ADS\]](#)
- [7] Mills, E. A. C. & **Battersby, C.**, *Origins of Scatter in the Relationship between HCN 1-0 and Dense Gas Mass in the Galactic Center*, January. 2017, ApJ, 835, 76 [\[ADS\]](#)
- [8] Svoboda, B. E., Shirley, Y. L., **Battersby, C.**, Rosolowsky, E. W., Ginsburg, A. G., Ellsworth-Bowers, T. P., Pestalozzi, M. R., Dunham, M. K., Evans, II, N. J., Bally, J., & Glenn, J., *The Bolocam Galactic Plane Survey. XIV. Physical Properties of Massive Starless and Star-forming Clumps*, May. 2016, ApJ, 822, 59 [\[ADS\]](#)
- [9] Zucker, C. & **Battersby, C.** and Goodman, A., *The Skeleton of the Milky Way*, December. 2015, ApJ, 815, 23 [\[ADS\]](#)
- [10] **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 [\[ADS\]](#)
- [11] **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 [\[ADS\]](#)
- [12] **Battersby, C. D.** 2013, in *The Formation of Massive Stars and Star Clusters in the Milky Way* New Horizons in Astronomy (BASH 2013) - Invited Review Paper [\[ADS\]](#)

- [13] **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 [\[ADS\]](#)
- [14] **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 [\[ADS\]](#)

Other Collaborative Publications

- [1] Williams, B. A., Walker, D. L., Longmore, S. N., Barnes, A. T., **Battersby, Cara**, Garay, G., Ginsburg, A., Gomez, L., Henshaw, J. D., Ho, L. C., Kruijssen, J. M. D., Lu, X., Mills, E. A. C., Petkova, M. A., & Zhang, Q., *The initial conditions for young massive cluster formation in the Galactic Centre: convergence of large-scale gas flows*, May. 2022, arXiv e-prints, arXiv:2205.07807 [\[ADS\]](#)
- [2] Myers, P. C., Hatchfield, H. P., & **Battersby, Cara**, *Virial Clumps in Central Molecular Zone Clouds*, April. 2022, ApJ, 929, 34 [\[ADS\]](#)
- [3] Henshaw, J. D., Barnes, A. T., **Battersby, Cara**, Ginsburg, A., Sormani, M. C., & Walker, D. L., *Star Formation in the Central Molecular Zone of the Milky Way*, March. 2022, To appear in Protostars and Planets VII; Editors: Shu-ichiro Inutsuka, Yuri Aikawa, Takayuki Muto, Kengo Tomida, and Motohide Tamura, arXiv:2203.11223 [\[ADS\]](#)
- [4] Henshaw, J. D., Krumholz, M. R., Butterfield, N. O., Mackey, J., Ginsburg, A., Haworth, T. J., Nogueras-Lara, F., Barnes, A. T., Longmore, S. N., Bally, J., Kruijssen, J. M. D., Mills, E. A. C., Beuther, H., Walker, D. L., **Battersby, Cara**, Bulatek, A., Henning, T., Ott, J., & Soler, J. D., *A wind-blown bubble in the Central Molecular Zone cloud G0.253+0.016*, February. 2022, MNRAS, 509, 4758 [\[ADS\]](#)
- [5] Stephens, I. W., Myers, P. C., Zucker, C., Jackson, J. M., Andersson, B. G., Smith, R., Soam, A., **Battersby, Cara**, Sanhueza, P., Hogge, T., Smith, H. A., Novak, G., Sadavoy, S., Pillai, T. G. S., Li, Z.-Y., Looney, L. W., Sugitani, K., Coudé, S., Guzmán, A., Goodman, A., Kusune, T., Santos, F. P., Zuckerman, L., & Encalada, F., *The Magnetic Field in the Milky Way Filamentary Bone G47*, February. 2022, ApJ, 926, L6 [\[ADS\]](#)
- [6] Ginsburg, A., Csengeri, T., Galván-Madrid, R., Cunningham, N., Álvarez-Gutiérrez, R. H., Baug, T., Bonfand, M., Bontemps, S., Busquet, G., Díaz-González, D. J., Fernández-López, M., Guzmán, A., Herpin, F., Liu, H., López-Sepulcre, A., Louvet, F., Maud, L., Motte, F., Nakamura, F., Nony, T., Olguin, F. A., Pouteau, Y., Sanhueza, P., Stutz, A. M., Towner, A. P. M., Armante, M., **Battersby, C.**, Bronfman, L., Braine, J., Brouillet, N., Chapillon, E., Di Francesco, J., Gusdorf, A., Izumi, N., Joncour, I., Lu, X., Men'shchikov, A., Menten, K. M., Moraux, E., Molet, J., Mundy, L., Nguyen Luong, Q., Reyes-Reyes, S. D., Robitaille, J., Rosolowsky, E., Sandoval-Garrido, N. A., Svoboda, B., Tatematsu, K., Walker, D. L., Whitworth, A., Wu, B., & Wyrowski, F., *ALMA-IMF II – investigating the origin of stellar masses: Continuum Images and Data Processing*, December. 2021, arXiv e-prints, arXiv:2112.08183 [\[ADS\]](#)
- [7] Motte, F., Bontemps, S., Csengeri, T., Pouteau, Y., Louvet, F., Stutz, A. M., Cunningham, N., López-Sepulcre, A., Brouillet, N., Galván-Madrid, R., Ginsburg, A., Maud, L., Men'shchikov, A., Nakamura, F., Nony, T., Sanhueza, P., Álvarez-Gutiérrez, R. H., Armante, M., Baug, T., Bonfand, M., Busquet, G., Chapillon, E., Díaz-González, D., Fernández-López, M., Guzmán, A. E., Herpin, F., Liu, H. L., Olguin, F., Towner, A. P. M., Bally, J., **Battersby, C.**, Braine, J., Bronfman, L., Chen, H. R. V., Dell'Ova, P., Di Francesco, J., González, M., Gusdorf, A., Hennebelle, P., Izumi, N., Joncour, I., Lee, Y. N., Lefloch, B., Lesaffre, P., Lu, X., Menten, K. M., Mignon-Risse, R., Molet, J., Moraux, E., Mundy, L., Nguyen Luong, Q., Reyes, N., Reyes Reyes, S. D., Robitaille, J. F., Rosolowsky, E., Sandoval-Garrido, N. A., Schuller, F., Svoboda, B., Tatematsu, K., Thomasson, B., Walker, D., Wu, B., Whitworth, A. P., & Wyrowski, F., *ALMA-IMF I – Investigating the origin of stellar masses: Introduction to the Large Program and first results*, December. 2021, arXiv e-prints, arXiv:2112.08182 [\[ADS\]](#)

- [8] Walker, C. K., Chin, G., Aalto, S., Anderson, C. M., Arenberg, J. W., **Battersby, Cara**, Bergin, E., Bergner, J., Biver, N., BJORAKER, G. L., Carr, J., Cavalié, T., De Beck, E., DiSanti, M. A., Hartogh, P., Hunt, L. K., Kim, D., Takashima, Y., Kulesa, C., Leisawitz, D., Najita, J., Rigopoulou, D., Schwarz, K., Shirly, Y., Stark, A. A., Tielens, X., Viti, S., Wilner, D., Wollack, E., & Young, E. 2021, in Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series, Vol. 11820, Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series, 1182000 [\[ADS\]](#)
- [9] Walker, D. L., Longmore, S. N., Bally, J., Ginsburg, A., Kruijssen, J. M. D., Zhang, Q., Henshaw, J. D., Lu, X., Alves, J., Barnes, A. T., **Battersby, Cara**, Beuther, H., Contreras, Y. A., Gómez, L., Ho, L. C., Jackson, J. M., Kauffmann, J., Mills, E. A. C., & Pillai, T., *Star formation in 'the Brick': ALMA reveals an active protocluster in the Galactic centre cloud G0.253+0.016*, May. 2021, MNRAS, 503, 77 [\[ADS\]](#)
- [10] Lu, X., Li, S., Ginsburg, A., Longmore, S. N., Kruijssen, J. M. D., Walker, D. L., Feng, S., Zhang, Q., **Battersby, Cara**, Pillai, T., Mills, E. A. C., Kauffmann, J., Cheng, Y., & Inutsuka, S.-i., *ALMA Observations of Massive Clouds in the Central Molecular Zone: Ubiquitous Protostellar Outflows*, March. 2021, ApJ, 909, 177 [\[ADS\]](#)
- [11] Orr, M. E., Hatchfield, H. P., **Battersby, Cara**, Hayward, C. C., Hopkins, P. F., Wetzell, A., Benincasa, S. M., Loebman, S. R., Sormani, M. C., & Klessen, R. S., *Fiery Cores: Bursty and Smooth Star Formation Distributions across Galaxy Centers in Cosmological Zoom-in Simulations*, February. 2021, ApJ, 908, L31 [\[ADS\]](#)
- [12] Leisawitz, D., Amatucci, E., Allen, L., Arenberg, J., Armus, L., **Battersby, Cara**, Bauer, J., Beaman, B. G., Bell, R., Beltran, P., Benford, D., Bergin, E., Bolognese, J., Bradford, C. M., Bradley, D., Burgarella, D., Carey, S., Carter, R., (Danny) Chi, J. D., Cooray, A., Corsetti, J., D'Asto, T., De Beck, E., Denis, K., Derkacz, C., Dewell, L., DiPirro, M., Earle, C. P., East, M., Edgington, S., Ennico, K., Fantano, L., Feller, G., Folta, D., Fortney, J., Gavares, B. J., Generie, J., Gerin, M., Granger, Z., Greene, T. P., Griffiths, A., Harpole, G., Harvey, K., Helmich, F., Hilliard, L., Howard, J., Jacoby, M., Jamil, A., Jamison, T., Kaltenegger, L., Kataria, T., Knight, J. S., Knollenberg, P., Lawrence, C., Lightsey, P., Lipsy, S., Mamajek, E., Martins, G., Mather, J. C., Meixner, M., Melnick, G., Milam, S., Mooney, T., Moseley, S. H., Narayanan, D., Neff, S., Nguyen, T., Nordt, A., Olson, J., Padgett, D., Petach, M., Petro, S., Pohner, J., Pontoppidan, K., Pope, A., Ramspacker, D., Rao, A., Roellig, T., Sakon, I., Sandin, C., Sandstrom, K., Scott, D., Seals, L., Sheth, K., Sokolsky, L. M., Staguhn, J., Steeves, J., Stevenson, K., Stoneking, E., Su, K., Tajdaran, K., Tompkins, S., Vieira, J., Webster, C., Wiedner, M. C., Wright, E. L., Wu, C., & Zmuidzinas, J., *Origins Space Telescope: baseline mission concept*, January. 2021, Journal of Astronomical Telescopes, Instruments, and Systems, 7, 011002 [\[ADS\]](#)
- [13] Leisawitz, D., Amatucci, E., Allen, L., Arenberg, J., Armus, L., **Battersby, Cara**, Bauer, J., Bell, R., Benford, D., Bergin, E., Booth, J. T., Bradford, C. M., Bradley, D., Carey, S., Carter, R., Cooray, A., Corsetti, J., Dewell, L., DiPirro, M., Drake, B. G., East, M., Ennico, K., Feller, G., Flores, A., Fortney, J., Granger, Z., Greene, T. P., Howard, J., Kataria, T., Knight, J. S., Lawrence, C., Lightsey, P., Mather, J. C., Meixner, M., Melnick, G., McMurtry, C., Milam, S., Moseley, S. H., Narayanan, D., Nordt, A., Padgett, D., Pontoppidan, K., Pope, A., Rafanelli, G., Redding, D. C., Rieke, G., Roellig, T., Sakon, I., Sandin, C., Sandstrom, K., Sengupta, A., Sheth, K., Sokolsky, L. M., Staguhn, J., Steeves, J., Stevenson, K., Su, K., Vieira, J., Webster, C., Wiedner, M., Wright, E. L., Wu, C., Yanatsis, D., Zmuidzinas, J., & Origins Space Telescope Mission Concept and Study Team, *Origins Space Telescope: trades and decisions leading to the baseline mission concept*, January. 2021, Journal of Astronomical Telescopes, Instruments, and Systems, 7, 011014 [\[ADS\]](#)
- [14] Meixner, M., Cooray, A., Leisawitz, D. T., Staguhn, J. G., Armus, L., **Battersby, Cara**, Bauer, J., Benford, D., Bergin, E., Bradford, C. M., Burgarella, D., Carey, S., De Beck, E., Ennico-Smith, K., Fortney, J. J., Gerin, M., Helmich, F. P., Kataria, T., Mamajek, E. E., Melnick, G. J., Milam, S. N., Moseley, S. H., Narayanan, D., Neff, S. G., Padgett, D., Pontoppidan, K., Pope, A., Roellig, T. L., Sakon, I., Sandstrom, K., Scott, D., Sheth, K., Stevenson, K. B., Su, K. Y., Vieira, J., Wiedner, M. C., Wright, E., Zmuidzinas, J., & Origins Study Team, *Origins Space Telescope science drivers to design traceability*, January. 2021, Journal of Astronomical Telescopes, Instruments, and Systems, 7, 011012 [\[ADS\]](#)

- [15] Wiedner, M. C., Aalto, S., Amatucci, E. G., Baryshev, A., **Battersby, Cara**, Belitsky, V., Bergin, E. A., Borgo, B., Carter, R. C., Caux, E., Cooray, A., Corsetti, J. A., De Beck, E., Delorme, Y., Desmaris, V., Dipirro, M. J., Ellison, B., Di Giorgio, A. M., Eggens, M., Gallego, J.-D., Gerin, M., Goldsmith, P. F., Goldstein, C., Helmich, F., Herpin, F., Hills, R. E., Hogerheijde, M. R., Hunt, L. K., Jellema, W., Keizer, G., Krieg, J.-M., Kroes, G., Laporte, P., Laurens, A., Leisawitz, D. T., Lis, D. C., Martins, G. E., Mehdi, I., Meixner, M., Melnick, G., Milam, S. N., Neufeld, D. A., Nguyen Tuong, N., Plume, R., Pontoppidan, K. M., Quartier-Dagorn, B., Risacher, C., Staguhn, J. G., Tong, E., Viti, S., & Wyrowski, F., *Heterodyne Receiver for Origins*, January. 2021, *Journal of Astronomical Telescopes, Instruments, and Systems*, 7, 011007 [\[ADS\]](#)
- [16] Tress, R. G., Sormani, M. C., Glover, S. C. O., Klessen, R. S., **Battersby, Cara D.**, Clark, P. C., Hatchfield, H. P., & Smith, R. J., *Simulations of the Milky Way's central molecular zone - I. Gas dynamics*, December. 2020, *MNRAS*, 499, 4455 [\[ADS\]](#)
- [17] Sormani, M. C., Tress, R. G., Glover, S. C. O., Klessen, R. S., **Battersby, Cara D.**, Clark, P. C., Hatchfield, H. P., & Smith, R. J., *Simulations of the Milky Way's Central Molecular Zone - II. Star formation*, October. 2020, *MNRAS*, 497, 5024 [\[ADS\]](#)
- [18] Wang, Y., Beuther, H., Schneider, N., Meidt, S. E., Linz, H., Ragan, S., Zucker, C., **Battersby, C.**, Soler, J. D., Schinnerer, E., Bigiel, F., Colombo, D., & Henning, T., *Dense gas in a giant molecular filament*, September. 2020, *A&A*, 641, A53 [\[ADS\]](#)
- [19] Henshaw, J. D., Kruijssen, J. M. D., Longmore, S. N., Riener, M., Leroy, A. K., Rosolowsky, E., Ginsburg, A., **Battersby, Cara**, Chevance, M., Meidt, S. E., Glover, S. C. O., Hughes, A., Kainulainen, J., Klessen, R. S., Schinnerer, E., Schrubba, A., Beuther, H., Bigiel, F., Blanc, G. A., Emsellem, E., Henning, T., Herrera, C. N., Koch, E. W., Pety, J., Ragan, S. E., & Sun, J., *Ubiquitous velocity fluctuations throughout the molecular interstellar medium*, July. 2020, *Nature Astronomy*, 4, 1064 [\[ADS\]](#)
- [20] Lu, X., Cheng, Y., Ginsburg, A., Longmore, S. N., Kruijssen, J. M. D., **Battersby, Cara**, Zhang, Q., & Walker, D. L., *ALMA Observations of Massive Clouds in the Central Molecular Zone: Jeans Fragmentation and Cluster Formation*, May. 2020, *ApJ*, 894, L14 [\[ADS\]](#)
- [21] Svoboda, B. E., Shirley, Y. L., Traficante, A., **Battersby, Cara**, Fuller, G. A., Zhang, Q., Beuther, H., Peretto, N., Brogan, C., & Hunter, T., *ALMA Observations of Fragmentation, Substructure, and Protostars in High-mass Starless Clump Candidates*, November. 2019, *ApJ*, 886, 36 [\[ADS\]](#)
- [22] Lu, X., Mills, E. A. C., Ginsburg, A., Walker, D. L., Barnes, A. T., Butterfield, N., Henshaw, J. D., **Battersby, Cara**, Kruijssen, J. M. D., Longmore, S. N., Zhang, Q., Bally, J., Kauffmann, J., Ott, J., Rickert, M., & Wang, K., *A Census of Early-phase High-mass Star Formation in the Central Molecular Zone*, October. 2019, *ApJS*, 244, 35 [\[ADS\]](#)
- [23] Sormani, M. C., Treß, R. G., Glover, S. C. O., Klessen, R. S., Barnes, A. T., **Battersby, Cara D.**, Clark, P. C., Hatchfield, H. P., & Smith, R. J., *The geometry of the gas surrounding the Central Molecular Zone: on the origin of localized molecular clouds with extreme velocity dispersions*, Oct. 2019, *Monthly Notices of the Royal Astronomical Society*, 488, 4663 [\[ADS\]](#)
- [24] Barnes, A. T., Longmore, S. N., Avison, A., Contreras, Y., Ginsburg, A., Henshaw, J. D., Rathborne, J. M., Walker, D. L., Alves, J., Bally, J., **Battersby, C.**, Beltrán, M. T., Beuther, H., Garay, G., Gomez, L., Jackson, J., Kainulainen, J., Kruijssen, J. M. D., Lu, X., Mills, E. A. C., Ott, J., & Peters, T., *Young massive star cluster formation in the Galactic Centre is driven by global gravitational collapse of high-mass molecular clouds*, Jun. 2019, *MNRAS*, 486, 283 [\[ADS\]](#)
- [25] Henshaw, J. D., Ginsburg, A., Haworth, T. J., Longmore, S. N., Kruijssen, J. M. D., Mills, E. A. C., Sokolov, V., Walker, D. L., Barnes, A. T., Contreras, Y., Bally, J., **Battersby, C.**, Beuther, H., Butterfield, N., Dale, J. E., Henning, T., Jackson, J. M., Kauffmann, J., Pillai, T., Ragan, S., Riener, M., & Zhang, Q., *'The Brick' is not a brick: a comprehensive study of the structure and dynamics of the central molecular zone cloud G0.253+0.016*, May. 2019, *MNRAS*, 485, 2457 [\[ADS\]](#)
- [26] Kruijssen, J. M. D., Dale, J. E., Longmore, S. N., Walker, D. L., Henshaw, J. D., Jeffreson, S. M. R., Petkova, M. A., Ginsburg, A., Barnes, A. T., **Battersby, C. D.**, Immer, K., Jackson, J. M., Keto, E. R., Krieger, N., Mills, E. A. C., Sánchez-Monge, Á., Schmiedeke, A., Suri, S. T., & Zhang, Q., *The*

dynamical evolution of molecular clouds near the Galactic Centre - II. Spatial structure and kinematics of simulated clouds, Apr. 2019, MNRAS, 484, 5734 [ADS]

- [27] Lu, X., Zhang, Q., Kauffmann, J., Pillai, T., Ginsburg, A., Mills, E. A. C., Kruijssen, J. M. D., Longmore, S. N., **Battersby, Cara**, Liu, H. B., & Gu, Q., *Star Formation Rates of Massive Molecular Clouds in the Central Molecular Zone*, Feb. 2019, ApJ, 872, 171 [ADS]
- [28] Ginsburg, A., Bally, J., Barnes, A., Bastian, N., **Battersby, C.**, Beuther, H., Brogan, C., Contreras, Y., Corby, J., Darling, J., De Pree, C., Galván-Madrid, R., Garay, G., Henshaw, J., Hunter, T., Kruijssen, J. M. D., Longmore, S., Lu, X., Meng, F., Mills, E. A. C., Ott, J., Pineda, J. E., Sánchez-Monge, Á., Schilke, P., Schmiedeke, A., Walker, D., & Wilner, D., *Distributed Star Formation throughout the Galactic Center Cloud Sgr B2*, February. 2018, ApJ, 853, 171 [ADS]
- [29] Walker, D. L., Longmore, S. N., Zhang, Q., **Battersby, C.**, Keto, E., Kruijssen, J. M. D., Ginsburg, A., Lu, X., Henshaw, J. D., Kauffmann, J., Pillai, T., Mills, E. A. C., Walsh, A. J., Bally, J., Ho, L. C., Immer, K., & Johnston, K. G., *Star formation in a high-pressure environment: an SMA view of the Galactic Centre dust ridge*, February. 2018, MNRAS, 474, 2373 [ADS]
- [30] Barnes, A. T., Longmore, S. N., **Battersby, C.**, Bally, J., Kruijssen, J. M. D., Henshaw, J. D., & Walker, D. L., *Star formation rates and efficiencies in the Galactic Centre*, August. 2017, MNRAS, 469, 2263 [ADS]
- [31] Lu, X., Zhang, Q., Kauffmann, J., Pillai, T., Longmore, S. N., Kruijssen, J. M. D., **Battersby, C.**, Liu, H. B., Ginsburg, A., Mills, E. A. C., Zhang, Z.-Y., & Gu, Q., *The Molecular Gas Environment in the 20 km s Cloud in the Central Molecular Zone*, April. 2017, ApJ, 839, 1 [ADS]
- [32] Ginsburg, A., Goss, W. M., Goddi, C., Galván-Madrid, R., Dale, J. E., Bally, J., **Battersby, C. D.**, Youngblood, A., Sankrit, R., Smith, R., Darling, J., Kruijssen, J. M. D., & Liu, H. B., *Toward gas exhaustion in the W51 high-mass protoclusters*, October. 2016, A&A, 595, A27 [ADS]
- [33] Meixner, M., Cooray, A., Carter, R., DiPirro, M., Flores, A., Leisawitz, D., Armus, L., **Battersby, C.**, Bergin, E., Bradford, C. M., Ennico, K., Melnick, G. J., Milam, S., Narayanan, D., Pontoppidan, K., Pope, A., Roellig, T., Sandstrom, K., Su, K. Y. L., Vieira, J., Wright, E., Zmuidzinas, J., Alato, S., Carey, S., Gerin, M., Helmich, F., Menten, K., Scott, D., Sakon, I., & Vavrek, R. 2016, in *Space Telescopes and Instrumentation 2016: Optical, Infrared, and Millimeter Wave*, Vol. 9904, 99040K [ADS]
- [34] Henshaw, J. D., Longmore, S. N., Kruijssen, J. M. D., Davies, B., Bally, J., Barnes, A., **Battersby, C.**, Burton, M., Cunningham, M. R., Dale, J. E., Ginsburg, A., Immer, K., Jones, P. A., Kendrew, S., Mills, E. A. C., Molinari, S., Moore, T. J. T., Ott, J., Pillai, T., Rathborne, J., Schilke, P., Schmiedeke, A., Testi, L., Walker, D., Walsh, A., & Zhang, Q., *Molecular gas kinematics within the central 250 pc of the Milky Way*, April. 2016, MNRAS, 457, 2675 [ADS]
- [35] 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*, Feb. 2016, A&A, 586, A50 [ADS]
- [36] 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., & Lopez, J. A. P., *High-mass star-forming cloud G0.38+0.04 in the Galactic center dust ridge contains H₂CO and SiO masers*, December. 2015, A&A, 584, L7 [ADS]
- [37] Lu, X., Zhang, Q., Kauffmann, J., Pillai, T., Longmore, S. N., Kruijssen, J. M. D., **Battersby, C.**, & Gu, Q., *Deeply Embedded Protostellar Population in the 20 km s²¹ Cloud of the Central Molecular Zone*, December. 2015, ApJ, 814, L18 [ADS]
- [38] 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 [ADS]
- [39] 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 [ADS]

- [40] 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 $^{13}\text{CO}(1-0)$* , January. 2015, ApJ, 799, 29 [\[ADS\]](#)
- [41] 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 [\[ADS\]](#)
- [42] Vutisalchavakul, N., Evans, II, N. J., & **Battersby, C.**, *The Star-formation Relation for Regions in the Galactic Plane: The Effect of Spatial Resolution*, December. 2014, ApJ, 797, 77 [\[ADS\]](#)
- [43] 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 $7.^\circ 5 \leq l \leq 194^\circ$* , November. 2013, ApJS, 209, 2 [\[ADS\]](#)
- [44] 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 [\[ADS\]](#)
- [45] 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 [\[ADS\]](#)
- [46] 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 [\[ADS\]](#)
- [47] Longmore, S. N., Kruijssen, J. M. D., Bally, J., Ott, J., Testi, L., Rathborne, J., Bastian, N., Bressert, E., Molinari, S., **Battersby, C.**, & Walsh, A. J., *Candidate super star cluster progenitor gas clouds possibly triggered by close passage to Sgr A**, June. 2013, MNRAS, 433, L15 [\[ADS\]](#)
- [48] Longmore, S. N., Bally, J., Testi, L., Purcell, C. R., Walsh, A. J., Bressert, E., Pestalozzi, M., Molinari, S., Ott, J., Cortese, L., **Battersby, C.**, Murray, N., Lee, E., Kruijssen, J. M. D., Schisano, E., & Elia, D., *Variations in the Galactic star formation rate and density thresholds for star formation*, February. 2013, MNRAS, 429, 987 [\[ADS\]](#)
- [49] Bressert, E., Ginsburg, A., Bally, J., **Battersby, C.**, Longmore, S., & Testi, L., *How to Find Young Massive Cluster Progenitors*, October. 2012, ApJ, 758, L28 [\[ADS\]](#)
- [50] 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 [\[ADS\]](#)
- [51] Wilcock, L. A., Ward-Thompson, D., Kirk, J. M., Stamatellos, D., Whitworth, A., **Battersby, C.**, Elia, D., Fuller, G. A., DiGiorgio, A., Griffin, M. J., Molinari, S., Martin, P., Mottram, J. C., Peretto, N., Pestalozzi, M., Schisano, E., Smith, H. A., & Thompson, M. A., *Isolated starless cores in infrared dark clouds in the Hi-GAL survey*, July. 2012, MNRAS, 424, 716 [\[ADS\]](#)
- [52] Longmore, S. N., Rathborne, J., Bastian, N., Alves, J., Ascenso, J., Bally, J., Testi, L., Longmore, A., **Battersby, C.**, Bressert, E., Purcell, C., Walsh, A., Jackson, J., Foster, J., Molinari, S., Meingast, S., Amorim, A., Lima, J., Marques, R., Moitinho, A., Pinhao, J., Rebordao, J., & Santos, F. D., *G0.253 + 0.016: A Molecular Cloud Progenitor of an Arches-like Cluster*, February. 2012, ApJ, 746, 117 [\[ADS\]](#)
- [53] 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 [\[ADS\]](#)
- [54] 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 [\[ADS\]](#)

- [55] Molinari, S., Bally, J., Noriega-Crespo, A., Compiègne, M., Bernard, J. P., Paradis, D., Martin, P., Testi, L., Barlow, M., Moore, T., Plume, R., Swinyard, B., Zavagno, A., Calzoletti, L., Di Giorgio, A. M., Elia, D., Faustini, F., Natoli, P., Pestalozzi, M., Pezzuto, S., Piacentini, F., Polenta, G., Polychroni, D., Schisano, E., Traficante, A., Veneziani, M., **Battersby, C.**, Burton, M., Carey, S., Fukui, Y., Li, J. Z., Lord, S. D., Morgan, L., Motte, F., Schuller, F., Stringfellow, G. S., Tan, J. C., Thompson, M. A., Ward-Thompson, D., White, G., & Umana, G., *A 100 pc Elliptical and Twisted Ring of Cold and Dense Molecular Clouds Revealed by Herschel Around the Galactic Center*, July. 2011, ApJ, 735, L33 [\[ADS\]](#)
- [56] Wilcock, L. A., Kirk, J. M., Stamatellos, D., Ward-Thompson, D., Whitworth, A., **Battersby, C.**, Brunt, C., Fuller, G. A., Griffin, M., Molinari, S., Martin, P., Mottram, J. C., Peretto, N., Plume, R., Smith, H. A., & Thompson, M. A., *The initial conditions of high-mass star formation: radiative transfer models of IRDCs seen in the Herschel Hi-GAL survey*, February. 2011, A&A, 526, A159 [\[ADS\]](#)
- [57] 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 [\[ADS\]](#)
- [58] 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 [\[ADS\]](#)
- [59] 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 [\[ADS\]](#)
- [60] 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 [\[ADS\]](#)
- [61] Elia, D., Schisano, E., Molinari, S., Robitaille, T., Anglés-Alcázar, D., Bally, J., **Battersby, C.**, Benedettini, M., Billot, N., Calzoletti, L., di Giorgio, A. M., Faustini, F., Li, J. Z., Martin, P., Morgan, L., Motte, F., Mottram, J. C., Natoli, P., Olmi, L., Paladini, R., Piacentini, F., Pestalozzi, M., Pezzuto, S., Polychroni, D., Smith, M. D., Strafella, F., Stringfellow, G. S., Testi, L., Thompson, M. A., Traficante, A., & Veneziani, M., *A Herschel study of YSO evolutionary stages and formation timelines in two fields of the Hi-GAL survey*, July. 2010, A&A, 518, L97 [\[ADS\]](#)
- [62] Molinari, S., Swinyard, B., Bally, J., Barlow, M., Bernard, J.-P., Martin, P., Moore, T., Noriega-Crespo, A., Plume, R., Testi, L., Zavagno, A., Abergel, A., Ali, B., Anderson, L., André, P., Baluteau, J.-P., **Battersby, C.**, Beltrán, M. T., Benedettini, M., Billot, N., Blommaert, J., Bontemps, S., Boulanger, F., Brand, J., Brunt, C., Burton, M., Calzoletti, L., Carey, S., Caselli, P., Cesaroni, R., Cernicharo, J., Chakrabarti, S., Chrysostomou, A., Cohen, M., Compiègne, M., de Bernardis, P., de Gasperis, G., di Giorgio, A. M., Elia, D., Faustini, F., Flagey, N., Fukui, Y., Fuller, G. A., Ganga, K., Garcia-Lario, P., Glenn, J., Goldsmith, P. F., Griffin, M., Hoare, M., Huang, M., Ikhenaoade, D., Joblin, C., Joncas, G., Juvela, M., Kirk, J. M., Lagache, G., Li, J. Z., Lim, T. L., Lord, S. D., Marengo, M., Marshall, D. J., Masi, S., Massi, F., Matsuura, M., Minier, V., Miville-Deschênes, M.-A., Montier, L. A., Morgan, L., Motte, F., Mottram, J. C., Müller, T. G., Natoli, P., Neves, J., Olmi, L., Paladini, R., Paradis, D., Parsons, H., Peretto, N., Pestalozzi, M., Pezzuto, S., Piacentini, F., Piazzi, L., Polychroni, D., Pomarès, M., Popescu, C. C., Reach, W. T., Ristorcelli, I., Robitaille, J.-F., Robitaille, T., Rodón, J. A., Roy, A., Royer, P., Russeil, D., Saraceno, P., Sauvage, M., Schilke, P., Schisano, E., Schneider, N., Schuller, F., Schulz, B., Sibthorpe, B., Smith, H. A., Smith, M. D., Spinoglio, L., Stamatellos, D., Strafella, F., Stringfellow, G. S., Sturm, E., Taylor, R., Thompson, M. A., Traficante, A., Tuffs, R. J., Umana, G., Valenziano, L., Vavrek, R., Veneziani, M., Viti, S., Waelkens, C., Ward-Thompson, D., White, G.,

- Wilcock, L. A., Wyrowski, F., Yorke, H. W., & Zhang, Q., *Clouds, filaments, and protostars: The Herschel Hi-GAL Milky Way*, July. 2010, A&A, 518, L100 [\[ADS\]](#)
- [63] Peretto, N., Fuller, G. A., Plume, R., Anderson, L. D., Bally, J., **Battersby, C.**, Beltran, M. T., Bernard, J.-P., Calzoletti, L., Digorgio, A. M., Faustini, F., Kirk, J. M., Lenfestey, C., Marshall, D., Martin, P., Molinari, S., Montier, L., Motte, F., Ristorcelli, I., Rodón, J. A., Smith, H. A., Traficante, A., Veneziani, M., Ward-Thompson, D., & Wilcock, L., *Mapping the column density and dust temperature structure of IRDCs with Herschel*, July. 2010, A&A, 518, L98 [\[ADS\]](#)
- [64] 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 [\[ADS\]](#)
- [65] Pratap, P., Shute, P. A., Keane, T. C., **Battersby, C.**, & Sterling, S., *Class i Methanol Masers: Signposts of Star Formation?*, May. 2008, AJ, 135, 1718 [\[ADS\]](#)