Thomas M. Hughes

Curriculum Vitae

Contact Details

Instituto de Física y Astronomía
Universidad de Valparaíso
Avda. Gran Bretaña 1111
Valparaíso, Chile

Tel: +56 9 9901 3258
Skype: txhughes
Web: txhughes.com
E-mail: thomas.hughes@uv.cl

Research Interests

Galaxy formation and evolution, including the growth of the red sequence, processes regulating star formation and chemical evolution, the impact of the environment, and spectroscopic techniques.

Experience

Research Fellow 08/2017 - Present
University of Science and Technology of China, China

Research Fellow 09/2015 - Present
Institute of Physics and Astronomy, University of Valparaiso, Chile

Research Scientist 03/2013 - 07/2015
Astronomical Observatory, Ghent University, Belgium

Kavli Research Fellow 01/2011 - 12/2012
Kavli Institute for Astronomy and Astrophysics, Peking University, China

Education

Doctor of Philosophy, Extragalactic Astrophysics 10/2007 - 12/2010
School of Physics and Astronomy, Cardiff University, United Kingdom

Master of Science, Physics and Astronomy with Honours 10/2003 - 07/2007
School of Physics and Astronomy, University of Birmingham, United Kingdom

Honours, Awards & Prizes

China-Chile Joint Fellowship, CAS-CONICYT (highest ranking) 2017
Chartered Physicist, United Kingdom Institute of Physics 2014
Kavli Research Fellowship, KIAA, Peking University 2011-2013
STFC Ph.D. Studentship, Cardiff University School of Physics & Astronomy 2007-2010
Winner: Student Poster Competition, RAS National Astronomy Meeting, Belfast 2008
Summer Studentship, University of Birmingham School of Physics & Astronomy 2007

Professional Associations

APEX Chilean Time Allocation Committee. President. 2019
Valparaiso ALMA Line Emission Survey. Co-investigator. 2016
Chilean Astronomical Society (SOCHIAS). Member. 2016
International Astronomical Union. Member. 2015
Astronomy and Astrophysics. Journal referee. 2015
Very Nearby Galaxies Survey. Co-investigator, P.I. C. D. Wilson. 2013
Herschel Observations of Edge-on Spirals. Co-investigator, P.I. M. Baes. 2013
SPIRE Specialist Astronomy Group 2 (SAG2). Member. 2013
Herschel Exploitation of Local Galaxy Andromeda. Consultant, P.I. J. Fritz. 2013
European Astronomical Society. Member. 2013
Chinese IFU Lijiang Project. Co-investigator, P.I. L. Hao. 2012
GALEX Ultraviotlet Virgo Cluster Survey. Co-investigator, P.I. A. Boselli. 2011
Herschel Fornax Cluster Survey. Co-investigator, P.I. J. Davies. 2011
Monthly Notices of the Royal Astronomical Society. Journal referee. 2011
Herschel Reference Survey. Consultant, P.I. S. Eales. 2010
Herschel Virgo Cluster Survey. Co-investigator, P.I. J. Davies. 2008
Royal Astronomical Society. Fellow. 2007
Institute of Physics. Member. 2002

Observing Experience	**Submillimetre:** Mixed modes and instruments on JCMT for 13 nights.	2017–2019
	Submillimetre: Mixed modes and instruments on the APEX telescope for 43 days.	2016–2018
	Optical: Spectroscopy with DBSP on the Palomar 200 inch telescope for 1 night.	2013
	Optical: Long-slit spectroscopy with YFOSC on the 2.4m Lijiang telescope for 3 nights.	2012
	Infrared: Near-infrared imaging with WFCAM on the 3.8m UKIRT for 4 nights.	2008
Technical Experience	**Languages:** Python, Fortran, C++, Visual Basic, CL and Unix shell scripts.	
	Software: CASA, IRAF, DS9, Topcat, Kepler, LaTeX, GIMP, R, IDL, Supermongo.	
Teaching & Outreach	**Physics Laboratory Teaching Assistant**, Cardiff University, UK	2007–2010
	Chemistry and Physics Instructor at Science Camp Watonka, USA	2005, 2006, 2009
	Visiting Scientist in Schools, various locations, UK	2010, 2012+
	GCSE Physics and Math Tutor, Cardiff, UK	2009–2011
	Judge at the UK National Science and Engineering Competition, UK	2015
Conferences, & Workshops	**East Asian Observatory**, Hilo, Hawaii	2017
	Seminar: *VALES: The Valparaíso ALMA Line Emission Survey.*	
	RAS National Astronomy Meeting, Hull, United Kingdom	2017
	Poster: *VALES: The Valparaíso ALMA Line Emission Survey.*	
	XIV Annual Meeting of the Chilean Astronomical Society, Maitencillo, Chile	2017
	Talk: *The physical conditions of interstellar gas in star-forming galaxies.*	
	Molecular Gas in Galactic Environments, Charlottesville, USA	2016
	Poster: *The CO emission from H-ATLAS galaxies up to $z = 0.4$*	
	XIII Annual Meeting of the Chilean Astronomical Society, Antofagasta, Chile	2016
	Talk: *Tracing star formation with [NII] 205 line emission in nearby galaxies.*	
	The Role of Hydrogen in the Evolution of Galaxies, Kuching, Malaysia	2014
	Talk: *Role of cold gas in the chemical evolution of nearby galaxies.*	
	Galaxies in 3D across the Universe, IAUS 309, Vienna, Austria	2014
	Poster: *Gas properties in the disc of NGC 891 from Herschel far-infrared spectroscopy.*	
	Poster: *Metallicity gradients of galaxies in the Herschel Reference Survey.*	
	SPICA Science Workshop, Leiden, Netherlands	2014
	Talk: *Insights into gas heating and cooling from Herschel FIR spectroscopy.*	
	NAC 69th Dutch Astronomy Conference, Leiden, Netherlands	2014
	Poster: *Gas properties in the disc of NGC 891 from Herschel far-infrared spectroscopy*	
	The Passage of Light through Spiral Galaxies, Leiden, The Netherlands	2014
	Talk: *The gas and dust properties of NGC 891 from Herschel observations.*	
	The Universe Explored By Herschel, ESA-ESTEC, Netherlands	2013
	Poster: *Resolved analysis of gas and dust in nearby edge-on spiral NGC 891.*	
	9th Serbian Conference on Spectral Lines in Astrophysics, Belgrade, Serbia	2013
	Talk: *Integrated spectroscopy of the Herschel Reference Survey*	
	FNRS Astronomy Day of the Royal Observatory, Brussels, Belgium	2013
	Talk: *Role of cold gas in the chemical evolution of nearby galaxies.*	
	Arecibo Observatory, Arecibo, Puerto Rico	2013
	Colloquium: *Role of cold gas in the chemical evolution of nearby galaxies.*	
	The Intriguing lives of Massive Galaxies, IAUS 295, Beijing, China	2012
	Poster: *Role of cold gas and environment on the stellar mass - metallicity relation.*	
	Shanghai Astronomical Observatory, Shanghai, China	2012
	Colloquium: *Role of cold gas in the chemical evolution of nearby galaxies.*	
	Fornax, Virgo, Coma et al. Workshop, ESO-Garching, Germany	2011
	Poster: *Stellar mass, metallicity and gas content for galaxies in different environments.*	
	Peking University Astrophysics Colloquium, Beijing, China	2011
	Talk: *Role of gas content on the stellar mass- metallicity relation for nearby spirals.*	
	Galaxy Evolution and Environment, Kuala Lumpur, Malaysia	2009
	Talk: *The migration of nearby spirals from the blue cloud to red sequence.*	
	RAS National Astronomy Meeting, Belfast, United Kingdom	2008
	Poster: *Migration from the blue cloud to red sequence of nearby spirals.*	

Publications

Refereed Journal Publications - Astronomy

58 in total - 7 as first author, 2 as second author, h-index = 27

1. Calderón-Castillo P., Nagar N., Yi S.-Y., Orellana G., Chang Y.-Y., Leiton R., **Hughes T. M.**, 2019, A&A. *Merging galaxies in isolated environments I. Multiband photometry, classification, stellar masses, and star formation rates*
2. Molina J., Ibar E., Smail I., Swinbank A. M., Villard E., Escala A., Sobral D., **Hughes T. M.**, 2019, MNRAS, 487, 4856M. *The kiloparsec-scale gas kinematics in two star-forming galaxies at $z \sim 1.47$ seen with ALMA and VLT-SINFONI*
3. Li J. Y., Xue Y. Q., Sun M. Y., Liu T., Vito F., Brandt W. N., **Hughes T. M.**, Yang G., Tozzi P., Zhu S. F., Zheng X. C., Luo B., Chen C. T., Vignali C., Gilli R., Shu X. W., 2019, ApJ, 877, 5L. *Piercing Through Highly Obscured and Compton-thick AGNs in the Chandra Deep Fields: I. X-ray Spectral and Long-term Variability Analyses*
4. Molina J., Ibar E., Villanueva V., Escala A., Cheng C., Baes M., Messias H., Yang C., Bauer F. E., van der Werf P., Leiton R., Aravena M., Swinbank A. M., Michalowski M. J., Muñoz-Arancibia A. M., Orellana G., **Hughes T. M.**, Farrah D., De Zotti G., Lara-López M. A., Eales S., Dunne L., 2019, MNRAS, 482, 1499M. *VALES V: A kinematic analysis of the molecular gas content in H-ATLAS galaxies at $z \sim 0.03$ - 0.35 using ALMA*
5. Zanella A., Daddi E., Magdis G., Diaz Santos T., Cormier D., Liu D., Cibinel A., Gobat R., Dickinson M., Sargent M., Popping G., Madden S. C., Bethermin M., **Hughes T. M.**, Valentino F., Rujopakarn W., Pannella M., Bournaud F., Walter F., Wang T., Elbaz D., Coogan R., 2018, MNRAS, 481, 1976. *The [CII] emission as a molecular gas mass tracer in galaxies at low and high redshift*
6. Motto V., Ibar E., Verdugo T., Molina J., **Hughes T. M.**, Birkinshaw M., Lopez-Cruz O., Black J. H., Gunawan D., Horellou C., Magana J., 2018, APJ, 863, 16M. *The Cosmic Seagull: a highly magnified disk-like galaxy at z=2.8*
7. Mosenkov A. V., Allaert F., Baes M., Bianchi S., Camps P., Clark C. J., De Geyter G., De Looze I., Fritz J., Gentile G., **Hughes T. M.**, Lewis F., Verstappen J., Verstocken S., Viaene S., 2018, A&A, 616A, 120M. *HERschel Observations of Edge-on Spirals (HEROES). IV: Dust energy balance problem.*
8. Cheng C., Ibar E., **Hughes T. M.**, Villanueva V., Leiton R., Orellana G., Munoz-Arancibia A., Lu N., Xu C. K., Willmer C. N. A., Huang J., Cao T., Yang C., Xue Y. Q., Torstensson K., 2017, MNRAS, 475, 248C. *VALES - IV. Exploring the transition of star formation efficiencies between normal and starburst galaxies using APEX/SEPIA and ALMA at low redshift*
9. Zheng X. C., Xue Y. Q., Brandt W. N., Li J. Y., Paolillo M., Yang G., Zhu S. F., Luo B., Sun M. Y., **Hughes T. M.**, Bauer F. E., Vito F., Wang J. X., Liu T., Vignali C., and Shu X. W., 2017, ApJ, 846, 127Z. *Deepest view of AGN X-ray variability with the 7 Ms Chandra Deep Field-South Survey.*
10. **Hughes T. M.**, Ibar E., Villanueva V., Aravena M., Baes M., Bourne N., Cooray A., Davies L. J. M., Driver S., Dunne L., Dye S., Eales S., Furlanetto C., Herrera-Camus R., Ivison R. J., van Kampen E., Lara-Lopez M., Maddox S. J., Michałowski M. J., Oteo I., Smith D., Smith M. W. L., Valiante E., Viaene S., van der Werf P., Xue Y. Q., 2017, MNRAS, 468, 103H. *VALES - III. The calibration between the dust continuum and interstellar gas content of star-forming galaxies.*
11. **Hughes T. M.**, Ibar E., Villanueva V., Aravena M., Baes M., Bourne N., Cooray A., Dunne L., Dye S., Eales S., Furlanetto C., Herrera-Camus R., Ivison R. J., van Kampen E., Lara-Lopez M., Maddox S. J., Michałowski M. J., Smith M. W. L., Valiante E., Viaene S., van der Werf P., Xue Y. Q., 2017, A&A, 602, 49H. *VALES - II. The physical conditions of interstellar gas in normal star-forming galaxies up to $z = 0.2$ revealed by ALMA.*

12. Villanueva V., Ibar E., **Hughes T. M.**, Lara-Lopez M. A., Dunne L., Eales S., Ivison R.J., Aravena M., Baes M., Bendo G. J., Bourne N., Cassata P., Cooray A., Dannerbauer H., Davies L. J. M., Driver S. P., Dye S., Furlanetto C., Herrera-Camus R., Maddox S., Michalowski M. J., Molina J., Riechers D., Sansom A. E., Smith M. W. L., Rodighiero G., Valiante E. and van der Werf P., 2017, MNRAS, 470, 3775. *VALES - I. The molecular gas content in star-forming dusty H-ATLAS galaxies up to z = 0.35.*

13. Bianchi S., Giovanardi C., Smith M. W. L., Fritz J., Davies J. I., Haynes M. P., Giovanelli R., Baes M., Bocchio M., Boissier S., Boquien M., Boselli A., Casasola V., Clark C. J. R., De Looze I., di Serego Alighieri S., Grossi M., Jones A. P., **Hughes T. M.**, Hunt L. K., Madden S., Magrini L., Pappalardo C., Ysard N., Zibetti S., 2017, A&A, 597, 25. *The Herschel Virgo Cluster Survey XX. Dust and gas in the foreground Galactic cirrus.*

14. Mosenkov A. V., Allaert F., Baes M., Bianchi S., Camps P., De Geyter G., De Looze I., Fritz J., Gentile G., **Hughes T. M.**, Lewis F., Verstappen J., Verstocken S., Viaene S., 2016, A&A, 592A, 71M. *HERschel Observations of Edge-on Spirals (HEROES). III: Dust energy balance study of IC 2531.*

15. Smith M. W. L. , Eales S. A., De Looze I., Baes M., Bendo G. J., Bianchi S., Boquien M., Boselli A., Buat V., Ciesla L., Clemens M., Clements D. L., Cooray A. R., Cortese L., Davies J. I., Fritz J., Gomez H. L., **Hughes T. M.**, Karczewski O. L., Lu N., Oliver S. J., Remy-Ruyer A., Spinoglio L., Viaene S., 2016, MNRAS, 462, 331. *The far reaching dust distribution in galaxy disks.*

16. Cortese L., Bekki K., Boselli A., Catinella B., Ciesla L., **Hughes T. M.**, Baes M., Bendo G. J., Boquien M., de Looze I., Smith M. W. L., Spinoglio L., Viaene S., 2016, MNRAS, 459, 3574C. *The selective effect of environment on the atomic and molecular gas-to-dust ratio of nearby galaxies in the Herschel Reference Survey.*

17. **Hughes T. M.**, Baes M., Schirm M., Parkin T., Wu R., De Looze I., Wilson C., Viaene S., Bendo G., Boselli A., Cormier D., Ibar E., Karczewski O., Lu N., Spinoglio L., 2016, A&A, 587A, 45H. *The spatially resolved correlation between [NII] 205 μm line emission and the 24 μm continuum in nearby galaxies.*

18. Allaert F., Gentile G., Baes M., De Geyter G., **Hughes T. M.**, Lewis F., Bianchi S., De Looze I., Fritz J., Holwerda B., Verstappen J., Viaene S., 2015, A&A, 582, 18A. *HERschel Observations of Edge-on Spirals (HEROES). II: Tilted-ring modelling of the atomic gas disks.*

19. Agius N. K., di Serego Alighieri S., Viaene S., Baes M., Sansom A. E., Bourne N., Bland-Hawthorn J., Brough S., Davis T. A., De Looze I., Driver S. P., Dunne L., Dye S., Eales S. A., **Hughes T. M.**, Ivison R. J., Kelvin L. S., Maddox S., Mahajan S., Pappalardo C., Robotham A. S. G., Rowlands K., Temi P., Valiante E., 2015, A&A, 451, 3815A. *H-ATLAS/GAMA and HeViCS - Dusty Early-Type Galaxies in Different Environments.*

20. De Geyter G., Baes M., De Looze I., Bendo G. J., Bourne N., Camps P., Cooray A., De Zotti G., Dunne L., Dye S., Eales S. A., Fritz J., Furlanetto C., Gentile G., **Hughes T. M.**, Ivison R. J., Maddox S. J., Michałowski M. J., Smith M. W. L., Valiante E., Viaene S., 2015, A&A, 451, 1728D. *Dust energy balance study of two edge-on spiral galaxies in the Herschel-ATLAS survey.*

21. Viaene S., De Geyter G., Baes M., Fritz J., Bendo G. J., Boquien M., Boselli A., Bianchi S., Cortese L., Côté P., Cuillandre J.-C., De Looze I., di Serego Alighieri S., Ferrarese L., Gwyn S. D. J., **Hughes T. M.**, Pappalardo C., 2015, A&A, 579A, 103V. *NGC4370: a case study for testing our ability to infer dust distribution and mass in nearby galaxies.*

22. Boselli A., Fossati M., Gavazzi G., Ciesla L., Buat V., Boissier S., **Hughes T. M.**, 2015, A&A, 579A, 102B. *Hα Imaging of the Herschel Reference Survey. The star formation properties of a volume-limited, K-band-selected sample of nearby late-type galaxies.*

23. Cormier D., Madden S. C., Lebouteiller V., Abel N., Hony S., Galliano F., Remy-Ruyer A., Bigiel F., Baes M., Boselli A., Chevance M., Cooray A., De Looze I., Doublier V., Galametz

M., **Hughes T. M.**, Karczewski O. Ł., Lee M.-Y., Lu N., Spinoglio L., 2015, A&A, 578A, 53C. *The Herschel Dwarf Galaxy Survey: I. Properties of the low-metallicity ISM from PACS spectroscopy.*

24. Grossi M., Hunt L. K., Madden S. C., **Hughes T. M.**, Auld R., Baes M., Bendo G. J., Bianchi S., Bizzocchi L., Boselli A., Boquien M., Clemens M., Corbelli E., Cortese L., Davies J. I., De Looze I., di Serego Alighieri S., Fritz J., Pappalardo C., Pierini D., Remy-Ruyer A., Smith M. W. L., Verstappen J., Viaene S., Vlahakis C., 2014, A&A, 574A, 126G. *The Herschel Virgo Cluster Survey XVIII: star-forming dwarfs in a cluster environment.*

25. **Hughes T. M.**, Foyle K., Schirm M. R. P., Parkin T. J., De Looze I., Wilson C. D., Bendo G. J., Baes M., Fritz J., Boselli A., Cooray A., Cormier D., Karczewski O. Ł., Lebouteiller V., Lu N., Madden S. C., Spinoglio L., Viaene S., 2015, A&A, 575A, 17H. *Insights into gas heating and cooling in the disc of NGC 891 from Herschel far-infrared spectroscopy.*

26. Jones A., Bendo G., Baes M., Boquien M., Boselli A., De Looze I., Fritz J., Galliano F., **Hughes T. M.**, Lebouteiller V., Lu N., Madden S. C., Remy-Ruyer A., Smith M. W. L., Spinoglio L., Zijlstra A. A., 2014, MNRAS, 448, 168J. *The relationship between polycyclic aromatic hydrocarbon emission and far-infrared dust emission from NGC 2403 and M83.*

27. Bendo G. J., Baes M., Bianchi S., Boquien M., Boselli A., Cooray A., Cortese L., De Looze I., di Serego Alighieri S., Fritz J., Gentile G., **Hughes T. M.**, Lu N., Pappalardo C., Smith M. W. L., Spinoglio L., Viaene S., Vlahakis C., 2015, MNRAS, 448, 135B. *The identification of dust heating mechanisms in nearby galaxies using Herschel 160/250 and 250/350 μm surface brightness ratios.*

28. Wu R., Madden S. C. , Galliano F., Wilson C. D., Kamenetzky J., Lee M.-Y., Schirm M. R. P., Hony S., Lebouteiller V., Spinoglio L., Cormier D., Glenn J., Maloney P. R., Pereira-Santaella M., Remy-Ruyer A., Baes M., Boselli A., Bournaud F., De Looze I., **Hughes T. M.**, Panuzzo P., Rangwala N., 2015, A&A, 575A, 88W. *Spatially resolved physical conditions of molecular gas and potential star formation tracers in M83 revealed by the Herschel SPIRE FTS.*

29. Pappalardo C., Bendo G. J., Bianchi S., Hunt L. K., Zibetti S., Corbelli E., di Serego Alighieri S., Davies J. I., Baes M., De Looze I., Fritz J., Pohlen M., Smith M. W. L., Verstappen J., Boquien M., Boselli A., Cortese L., **Hughes T. M.**, Viaene S., Bizzocchi L., Clemens M., 2014, A&A, 573A, 129P. *The Herschel Virgo Cluster Survey: XVII. SPIRE point-source catalogs and number counts.*

30. De Looze I., Fritz J., Baes M., Bendo G. J., Cortese L., Boquien M., Boselli A., Camps P., Cooray A., Cormier D., Davies J. I., De Geyter G., **Hughes T. M.**, Jones A. P., Karczewski O. Ł., Lebouteiller V., Lu N., Madden S. C., Remy-Ruyer A., Spinoglio L., Smith M. W. L., Viaene S., Wilson C. D., 2014, A&A, 571, 69. *High-resolution, 3D radiative transfer modeling: I. The grand-design spiral galaxy M 51.*

31. Baes M., Allaert F., Sarzi M., De Looze I., Fritz J., Gentile G., **Hughes T. M.**, Puerari I., Smith M. W. L., Viaene S., 2014, MNRAS, 444, L90. *An extremely low gas-to-dust ratio in the dust-lane lenticular galaxy NGC5485.*

32. De Geyter G., Baes M., Camps P., Fritz J., De Looze I., **Hughes T. M.**, Viaene S., Gentile G., 2014, MNRAS, 441, 869. *The distribution of interstellar dust in CALIFA edge-on galaxies via oligochromatic radiative transfer fitting.*

33. Fuller C., Davies J. I., Auld R., Smith M. W. L., Baes M., Bianchi S., Bocchio M., Boselli A., Clemens M., Davis T., De Looze I., di Serego Alighieri S., Grossi M., **Hughes T. M.**, Viaene S., Serra P. , 2013, MNRAS, 440, 1571F. *The Herschel Fornax Cluster Survey II: FIR properties of optically-selected Fornax Cluster galaxies .*

34. Viaene S., Fritz J., Baes M., Bendo G. J., Blommaert J., Boquien M., Boselli A., Ciesla L., Cortese L., De Looze I., Gear W., Gentile G., **Hughes T. M.**, Jarrett T., Karczewski O. L., Smith M.W.L., Spinoglio L., Tamm A., Tempel E., Thilker D., Verstappen J., 2013, A&A, 567, 71. *The Herschel Exploitation of Local Galaxy Andromeda (HELGA) IV. Dust scaling*

relations at sub-kpc resolution.

35. **Hughes T. M.**, Baes M., Fritz J., Smith M.W.L., Parkin T.J., Gentile G., Bendo G. J., Wilson C. D., Allaert F., Bianchi S., De Looze I., Verstappen J., Viaene S., Boquien M., Boselli A., Clements D. L., Davies J. I., Galametz M., Madden S. C., Remy-Ruyer A., Spinoglio L., 2014, A&A, 565A 4H. *A resolved analysis of cold dust and gas in the nearby spiral NGC891.*

36. Ciesla L., Boquien M., Boselli A., Buat V., Cortese L., Bendo G. J., Heinis S., Eales S., Smith M.W.L., Baes M., Bianchi S., De Looze I., di Serego Alighieri S., Galametz M., Galliano F., **Hughes T. M.**, Madden S. C., Pierini D., Remy-Ruyer A., Spinoglio L., Vaccari M., Viaene S., 2014, A&A, 565 128. *Dust spectral energy distributions of gas-rich galaxies: an insight from the Herschel Reference Survey.*

37. Baes M., Herranz D., Bianchi S., Ciesla L., Clemens M., De Zotti G., Allaert F., Auld R., Bendo G.J., Boquien M., Boselli A., Clements D.L., Cortese L., Davies J. I., De Looze I., di Serego Alighieri S., Fritz J., Gentile G., Gonzalez-Nuevo J., **Hughes T. M.**, Smith M.W. L., Verstappen J., Viaene S., Vlahakis C., 2014, A&A, 562, 106B. *The Herschel Virgo Cluster Survey: XV. Planck submillimetre sources in the Virgo Cluster.*

38. Remy-Ruyer A., Madden S.C., Galliano F., Lebouteiller V., Galametz M., Takeuchi T.T., Asano R.S., Zhukovska S., Jones A., Bocchio M., Baes M., Bendo G.J., Boquien M., Boselli A., Cormier D., De Looze I., Doublier-Pritchard V., **Hughes T. M.**, Karczewski O.L., Spinoglio L. 2014, A&A., arXiv:1312.3442. *Gas-to-dust mass ratios in galaxies over a 2 dex metallicity range.*

39. Davies J. I., Bianchi S., Baes M., Bendo G.J., Clemens M., De Looze I., di Serego Alighieri S., Fritz J., Fuller C., Pappalardo C., **Hughes T. M.**, Madden S., Smith M.W. L., Verstappen J., Vlahakis C., 2014, MNRAS, 438, 1922. *The Herschel Virgo Cluster Survey XVI: a cluster inventory.*

40. **Hughes T. M.**, Cortese L., Boselli A., Gavazzi G., Davies J.I., 2013, A&A, 550A, 115H. *The role of cold gas and environment on the stellar mass - metallicity relation of nearby galaxies.*

41. Boselli A., **Hughes T. M.**, Cortese L., Gavazzi G., 2013, A&A, 550A, 114B. *Integrated spectroscopy of the Herschel Reference Survey.*

42. Davies J. I., Bianchi S., Baes M., Boselli A., Ciesla L., Clemens M., Davis T. A., De Looze I., di Serego Alighieri S., Fuller C., Fritz J., Hunt L. K., Serra P., Smith M. W. L., Verstappen J., Vlahakis C., Xilouris E. M., Bomans D., **Hughes T. M.**, Garcia-Appadoo D., Madden S., 2013, MNRAS, 428, 834D. *The Herschel Fornax Cluster Survey – I. The bright galaxy sample.*

43. Eales S., Smith M.W.L., Auld R., Baes M., Bendo G.J., Bianchi S., Boselli A., Ciesla L., Clements D., Cooray A., Cortese L., Davies J.I., De Looze I., Galametz M., Gear W., Gentile G., Gomez H., Fritz J., **Hughes T. M.**, Madden S., Magrini L., Pohlen M., Spinoglio L., Verstappen J., Vlahakis C., Wilson C.D., 2012, ApJ, 761, 168E. *Can Dust Emission be Used to Estimate the Mass of the Interstellar Medium in Galaxies?.*

44. Boselli A., Ciesla L., Cortese L., Buat V., Boquien M., Bendo G. J., Boissier S., Eales S., Gavazzi G., **Hughes T. M.**, Pohlen M., Smith M. W. L., Baes M., Bianchi S., Clements D. L., Cooray A., Davies J., Gear W., Madden S., Magrini L., Panuzzo P., Remy A., Spinoglio L., Zibetti S., 2012, A&A, 540A, 54B. *Far-infrared colours of nearby late-type galaxies in the Herschel Reference Survey.*

45. Cortese L., Ciesla L., Boselli A., Bianchi S., Gomez H., Smith M. W. L., Bendo G. J., Eales S., Pohlen M., Baes M., Corbelli E., Davies J. I., **Hughes T. M.**, Hunt L. K., Madden S. C., Pierini D., di Serego Alighieri S., Zibetti S. , Boquien M., Clements D. L., Cooray A., Galametz M., Magrini L., Pappalardo C., Spinoglio L., Vlahakis C., 2012, A&A, 540A, 52C. *The dust scaling relations of the Herschel Reference Survey.*

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Serego Alighieri S., Verstappen J., 2011, A&A, 535A, 13M. *The Herschel Virgo Cluster Survey. IX. Dust-to-gas mass ratio and metallicity gradients in four Virgo spiral galaxies.*

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