Dr. Alasdair P. Thomson

Fellow of the Royal Astronomical Society; PDRA in galaxy evolution

(+44) 161 275 4103 | alasdair.thomson@manchester.ac.uk | http://www.jb.man.ac.uk/~athomson | @a_p_thomson

Jodrell Bank Centre for Astrophysics
Room 3.208, Alan Turing Building
Oxford Road, Manchester
M13 9PL, United Kingdom

Phone: +44 161 275 4103
Email: alasdair.thomson@manchester.ac.uk
Homepage: http://www.jb.man.ac.uk/~athomson/

Employment

University of Manchester

STFC-Funded PDRA in galaxy evolution — *August 2017 – Present*

- **University of Southampton** — *Visiting Fellow, September 2018 – Present*

Durham University

ERC-Funded PDRA in galaxy evolution — *April 2013 – August 2017*

Education

The University of Edinburgh

PhD, Thesis: "The interstellar medium in lensed star-forming galaxies at $z \sim 2.5$" (Supervisor: R. J. Ivison) — *Sept 2009 – Apr 2013*

The University of Edinburgh

M. Phys (Hons) in astrophysics, Thesis: "The properties of star clusters in the Magellanic Clouds" (Supervisor: A. D. Mackey) — *Sept 2004 – May 2009*

Science highlights

•First ~ 100 pc observations of CO(1-0) in a $z = 2.3$ lensed starburst galaxy with VLA (SMM J21352–0102; Thomson et al., 2015)

•First study of the far-infrared/radio correlation in ALMA-detected submillimetre galaxies (SMGs) at $z = 2$–5 (Thomson et al., 2014)

•Measured the contribution of Hα-selected SFGs to the evolving H_2 density of the Universe from $z = 0.4$–2.2 (Thomson et al., 2017)

•First observational evidence for synchrotron spectral ageing in $z \sim 2$ SMGs via multi-frequency radio observations (Thomson et al., 2019b)

•Produced widest (30 arcmin), deepest ($1.5\ \mu$Jy beam^{-1}) high-resolution (200 mas) radio images made with e-MERLIN at 1.4 GHz and coordinated delivery of Data Release 1 from the e-MERLIN Galaxy Evolution Survey (Thomson et al., 2019a; Muxlow et al., 2019, in prep)

Research goals

My main research goal is to understand the processes by which today's massive galaxies formed their stellar mass throughout cosmic time. I do this using high-resolution radio and submillimetre continuum observations (which offer a dust-unbiased tracer of star-formation) to study galaxies, coupled with multiwavelength data. These observations are supplemented with observations of spectral line tracers (primarily ^{12}CO) which probe the interstellar medium (i.e. the raw fuel from which new stars form). I am an expert in the techniques of deep, wide-field high-resolution radio imaging at ~GHz frequencies and interferometric spectral line observations, and will use these skills in the coming years to develop our understanding of how the processes which drive and quench star-formation influence galaxy evolution.

Professional Experience/Memberships

Session SOC chair at UK National Astronomy Meeting

Lancaster

Organised and chaired session "Studying galaxy evolution from reionization to cosmic noon with the latest-generation multiwavelength facilities" — *Jun. 2019*

The e-MERLIN Galaxy Evolution Survey (e-MERGE)

Leading science delivery (including maps and source catalogues) for e-MERGE, an e-MERLIN large programme with > 80 national/international members. e-MERGE utilises > 900 hours of e-MERLIN and > 50 hours of VLA time to produce sensitive, high-resolution, wide-field imaging of the GOODS-N extragalactic field. — *2017 – Present*

ESO Obesrving Programmes Committee (OPC) Panel Member: P101–103

Garching, Germany

Invited international panel member on ESO time allocation committee for three cycles, responsibile for scientifically assessing $\gtrsim 80$ proposals/cycle requesting time on all ESO facilities (VLT/VLTI, VST, VISTA, APEX)

Nov 2017 – Nov 2018

eMERLIN Expert Science Referee

Science referee for proposals requesting use of STFC-funded eMERLIN radio interferometer

Jun 2017 – Present

Referee for papers in peer-reviewed journals

Astronomy & Astrophysics (since Aug. 2018), The Astrophysical Journal Letters (since Jun. 2019)

SMG20: 20 Years of Submillimetre Galaxies

Durham, UK

LOC Member

Jul 2017

Durham-Edinburgh eXtragalactic (DEX) Workshops (SOC/LOC chair)

Durham/Edinburgh, UK

Co-organised annual DEX workshops (including twice as SOC chair)

Jan 2014 – Jan 2017

STEM Ambassador

Accredited volunteer offering free-of-charge resource for teachers and outreach event organisers in science, technology, engineering and mathematics.

2018 – Present

Fellow of the Royal Astronomical Society

2010 – Present

Teaching Experience

Supervision of research students

University of Manchester

Aug 2017 – PRESENT

- 2019: **Lecturer** PHYS60441: Techniques of Radio Astronomy
- 2018–present: **Ann Njeri Ng'Endo (PhD)** "Extremely Deep Milliarcsecond Radio Observations of the High Redshift Radio Source Population" & **Isaac Mutie (MScR)** " Radio studies of dense gas in NGC 1068"
  Supervisors: (Beswick/Garrett – with Thomson as part of supervisory team)
- 2017–2019: **Jack F. Radcliffe (PhD)** "Identifying AGN in the faint radio sky"
  Supervisors: (Garrett/Barthel – with Thomson as part of supervisory team)
- 2017/18: **Tracy Garratt (MScR; as primary supervisor)** "Dusty star forming galaxies identified via multi-wavelength imaging and their physical properties "
  Supervisors: (Thomson/Beswick). Tracy graduated with distinction in 2018, and is currently 2nd year PhD student at Univ. of Hertfordshire

Durham University

Apr 2013 – Aug 2017

- Mentoring via supervisory teams for PhD students **F. An** (joint Durham/CAS; graduated 2019; currently PDRA at IDIA, SA), **A. L. R. Danielson** (graduated 2014; currently science outreach coordinator with Ogden Trust), **J. M. Simpson** (graduated 2015; currently EACOA fellow at ASIAA), **S. M. Stach** (graduated 2019; now PDRA at Durham University)

Teaching Assistant

Durham University

Apr 2013 – Aug 2017

- Discovery Skills in Physics: delivered tutorials and supervised laboratory experiments for undergraduate students

The University of Edinburgh

Sep 2009 – Apr 2013

- Discovering Astronomy & Astronomy 1G: delivered tutorials and marked coursework for undergraduate students
- Physics 2A/2B: delivered practical course on scientific programming in JAVA and supervised laboratory projects

Consortium memberships

I am an active member of the following consortia and their offshoots: **(1)** e-MERLIN Galaxy Evolution Survey (e-MERGE; coordinating production of deepest wide-field images from e-MERLIN+VLA and leading science delivery including source catalogue paper), **(2)** ^{12}CO ATCA Legacy Archive of Star-Forming Galaxies (COALAS; leading reduction and publication of ~ 200 hours of ATCA 7 mm spectral line data covering ALMA-identified SMGs in ECDFS), **(3)** SKA Pathfinders and Radio Continuum Surveys (SPARCS) Reference Fields Working Group, **(4)** ALMA/SCUBA-2 Cosmology Legacy Survey of UDS (AS2UDS), **(5)** ALMA/LABOCA survey of ECDFS (ALESS), **(6)** SCUBA-2 survey of the COSMOS field (S2-COSMOS),

Talks & Presentations

Summary: 6 invited national and international colloquia and seminars, 12 contributed research talks at major national and international conferences. Highlights shown below (talks within local institute not shown):

†Invited talk; ⊖Outreach seminar

The eMERLIN Galaxy Evolution Survey (eMERGE) DR1: a sub-arcsecond resolution study of the μJy radio sky — *Turin, IT*

2019 LOFAR SKP Science Meeting — *Dec 2019*

†**Studying galaxy evolution through cosmic time via the μJy radio source population: results from the eMERLIN Galaxy Evolution Survey (eMERGE) DR1** — *University of Hertfordshire, UK*

Invited seminar — *Dec 2019*

†**Studying galaxy evolution through cosmic time via the μJy radio source population: results from the eMERLIN Galaxy Evolution Survey (eMERGE) DR1** — *University of Southampton, UK*

Invited seminar — *Nov 2019*

†**eMERLIN Legacy Surveys - a new window on the radio Universe** — *Lancaster University, UK*

Invited seminar — *Dec 2018*

Studying galaxy evolution through cosmic time via the μJy radio population: early results from e-MERGE DR1 — *14th European VLBI Network Symposium & Users' Meeting*

Talk delivered in absentia by T. W. B. Muxlow — *Oct 2018*

Studying galaxy evolution through cosmic time via the μJy radio population: early results from e-MERGE DR1 — *Royal Astronomical Society, London, UK*

Community Meeting of the UK SKA Science Community — *Jul 2018*

Studying galaxy evolution through cosmic time via the μJy radio source population: results from the eMERLIN Galaxy Evolution Survey (eMERGE) DR1 — *Dominion Radio Astrophysical Observatory, BC, Canada*

SPARCS VIII: Early Science on the path to SKA Pathfinders — *May 2018*

†**The spatially-resolved radio spectra of ALMA-identified submillimetre galaxies; evidence of age-related spectral curvature and cosmic ray diffusion** — *ESO, Garching, Germany*

Invited journal club talk — *Nov 2018*

The complex multi-frequency radio properties of ALMA-identified $z > 2$ starburst galaxies — *Jodrell Bank Centre for Astrophysics, Manchester, UK*

Measuring Star Formation in the Radio, Millimetre and Submillimetre — *Jul 2017*

†**More than LESS: an ALMA follow-up of single-dish identified submillimetre sources** — *ICRAR, University of Western Australia*

Invited seminar — *Oct 2016*

Sub-mm selected starbursts at high-redshift — *Jodrell Bank Observatory, Macclesfield, UK*

eMERLIN and Jodrell Bank; a radio astronomy facility for the SKA era — *Sep 2016*

⊖**A new era in radio astronomy: The Square Kilometer Array** — *Edinburgh, UK*

Royal Observatory Edinburgh: winter talks diet — *Feb 2016*

†**An ALMA study of LABOCA submillimetre sources** — *East Asian Observatory, Hilo, HI, USA*

Invited coffee talk — *Sep 2015*

The ISM in $z \sim 2.5$ starbursting galaxies: dust, synchotron emission and cold gas — *European Southern Observatory, Santiago, Chile*

Dissecting galaxies Near and Far: High Resolution Views of Star Formation and the ISM — *Mar 2015*

⊖**The most extreme starburst galaxies in the Universe** — *Edinburgh, UK*

Royal Observatory Edinburgh: winter talks diet — *Feb 2015*

⊖**An introduction to extragalactic astronomy** — *Millburn Academy, Inverness, UK*

June 2014

Studying the molecular gas of $z \sim 2$ submillimetre galaxies with the Karl G. Jansky VLA — *IPAC, Pasadena, CA, USA*

Infrared and submillimetre probes of gas in galaxies: from the Milky Way to the Distant Universe — *Mar 2013*

The molecular gas content of $z \sim 2$ submillimetre galaxies — *Manchester, UK*

UK-Germany National Astronomy Meeting (NAM) — *Mar 2012*

Tracing the molecular gas in distant galaxies via CO(1-0) imaging with the EVLA — *Irvine, CA, USA*

Unveiling the far-IR and sub-mm extragalactic Universe: *Herschel*, ALMA, CCAT, SPICA and beyond — *May 2011*

Imaging of CO(1-0) in submillimetre galaxies with EVLA — *Edinburgh, UK*

Durham-Edinburgh eXtragalactic Workshop (DEX VII) — *Sep 2010*

Observing/PI Experience

The Karl G. Jansky VLA

Over 200 hours awarded as PI (Thomson) since 2011 (projects 11B-100, 15A-249, 15B-195, 16B-305, 19A-401), as well as leading data reduction/analysis on a further > 350 hours for PIs R. J. Ivison, I. Smail, A. M. Swinbank, C. M. Harrison

ALMA

30 hours awarded as PI (Thomson) since 2013 (2015.1.01227.S & 2018.1.01767.S) to obtain high-resolution imaging of the ISM in the $z = 2.3$ starburst galaxy SMM J21352–0102 and to study CO(3-2) in a sample of radio-quiet quasars

eMERLIN

140 hours awarded as PI (Thomson) since 2013 (CY1035, CY2230 & CY7224) to obtain deep, high resolution radio imaging of high-z starburst galaxies, plus lead on data reduction for a further > 200 hours for PIs A. M. Swinbank, C. M. Harrison & D. Rosario (CY1020, CY1022, CY2217, CY7211, CY7220)

James Clerk Maxwell Telescope

Conducted 14 nights $450\ \mu$m/$850\ \mu$m observations of COSMOS field as part of SCUBA-2 Cosmology Legacy Survey (Q3 2013/2015; PI: I. Smail)

Australia Telescope Compact Array

50 hours awarded as PI (Thomson) to study low-z analogues of high-z SMGs (C2845). Additionally – experienced 7 mm observer with > 200 hours observed for C3026 (PI: M. Huynh) and C3181 (PI: H. Dannerbauer) to map CO(1-0) in $z \sim 2$ SMGs.

Other relevant experience

Outreach

STEM Ambassador (since 2018); presented demonstration of multiwavelength astronomy to ~ 1000 attendees at Manchester Science Festival as part of ESO-run exhibit; two regional TV appearances (one recorded on Made In Tyne & Wear and one live on STV Edinburgh) to discuss press release on "Teacup" AGN (co-issued with C. M. Harrison) and promote Royal Observatory Winter Talks diet, respectively; co-organised "Space Day" outreach event at Durham University, Jan 2016 for local secondary schools; worked with Royal Observatory Edinburgh's visitor centre (2009-13) at events including public observing sessions, Observatory "doors-open" day, exhibits/planetarium sessions with local schools and at "Dynamic Earth" museum and National Museum of Scotland.

References

Prof. Ian Smail
Centre for Extragalactic Astronomy
Department of Physics
Durham University
South Road, Durham
DH1 3LE, UK
ian.smail@durham.ac.uk

Prof. Rob Ivison
European Southern Observatory
Karl Schwarzchild Strase 2
D-85748 Garching
Munich
Germany
rob.ivison@eso.org

Dr. Rob Beswick
Jodrell Bank Centre for Astrophysics
The Alan Turing Building
The University of Manchester
Oxford Road, Manchester
M13 9PL, UK
robert.beswick@manchester.ac.uk

Publication record

Summary: h-index of 18, 1971 citations (ADS; as of 09/12/2019), 36 refereed papers accepted in high-impact journals (of which 9 cited > 100 times), 3 in submission, 5 papers accepted as first author (3 in prep), 4 as top-three author with major contribution ($\gtrsim 30\%$) to output, 1 conference proceedings (as lead author).

†First author paper; △Significant contribution (top-three author/$> 30\%$ of work)

†1. COALAS I: The cold molecular gas properties of ALMA-selected submillimetre galaxies

Thomson, A. P., Dannerbauer, H., et al., *in prep.*

†2. The e-MERLIN Galaxy Evolution Survey (e-MERGE) II. Continuum data and source catalogue release

Thomson, A. P. , Radcliffe, J. F., Wrigley, N. H. et al., *in prep.*

†3. Outflowing molecular and ionized gas in $z \lesssim 0.3$ radio-quiet quasars

Thomson, A. P., Harrison, C. M., Jarvis, M. E., et al., *in prep.*

△4. The e-MERLIN Galaxy Evolution Survey (e-MERGE) I. Overview, Survey Description and Initial Data Release

Muxlow, T. W. B., **Thomson, A. P.** , Radcliffe, J. F., et al., 2019, MNRAS, *submitted*

5. The $L_{1.4\,GHz}$–L'_{CO}–L_{IR} plane for star forming galaxies I: An empirical approach to predict molecular gas masses using radio data

Orellana, G., Ibar, E., Leiton, R., ..., **Thomson, A. P.**, et al., 2019, MNRAS, *submitted*

6. An ALMA Survey of the SCUBA-2 CLS Field: physical properties of 707 submillimetre galaxies

Dudzevičiūtė, U., Smail, Ian, Swinbank, A. M., ..., **Thomson, A. P.**, et al., 2019, MNRAS, *submitted*

7. An ALMA Survey of the SCUBA-2 Cosmology Legacy Survey UKIDSS/UDS Field: high-resolution dust continuum morphologies and the link between sub-millimetre galaxies and spheroid formation

Gullberg, B., Smail, Ian, Swinbank, A. M., ..., **Thomson, A. P.**, et al., 2019, MNRAS, 490, 4956

△8. An insight into the extragalactic transient and variable microJy radio sky across multiple decades

J. F. Radcliffe, R. J. Beswick, **A. P. Thomson**, T. W. B. Muxlow, M. A. Garrett, P. D. Barthel, 2019, MNRAS, 490, 4024

†9. The spatially-resolved radio spectra of ALMA-identified submillimetre galaxies: evidence of age-related spectral curvature and cosmic ray diffusion

Thomson, A. P., Smail, Ian, Swinbank, A. M., et al., 2019, ApJ, 883, 2

10. An ALMA survey of the SCUBA-2 Cosmology Legacy Survey UKIDSS/UDS field: source catalogue and properties

Stach, S. M., Dudzevičiūtė, U., Smail, Ian, ..., **Thomson, A. P.**, et al., 2019, MNRAS, 487, 4648

11. The submillimetre view of massive clusters at $z \sim 0.8$–1.6

Cooke, E. A., Smail, Ian, Stach, S. M., ..., **Thomson, A. P.** et al., 2019, MNRAS, 486, 3047

12. The East Asian Observatory SCUBA-2 Survey of the COSMOS Field: Unveiling 1147 Bright Sub-millimeter Sources across 2.6 Square Degrees

Simpson, J. M., Smail, Ian, Swinbank, A. M., ..., **Thomson, A. P.** et al., 2019, ApJ, 880, 1

13. Revealing the Stellar Mass and Dust Distributions of Submillimeter Galaxies at Redshift 2

Lang, P., Schinnerer, E., Smail, Ian, ..., **A. P. Thomson** et al., 2019, ApJ, 879, 54

△14. Prevalence of radio jets associated with galactic outflows and feedback from quasars

Jarvis, M. E., Harrison, C. M., **Thomson, A. P.** et al., 2019, MNRAS, 485, 2710

†15. Studying galaxy evolution through cosmic time via the μJy radio population: early results from eMERGE

Thomson, A. P. , Muxlow, T. W. B., Smail, Ian, et al., 2019, Proceedings from the 14^{th} European VLBI Network Symposium and Users' Meeting (arXiv:1902.02356)

16. An ALMA survey of CO in submillimetre galaxies: companions, triggering, and the environment in blended sources

Wardlow, J. L., Simpson, J. M., Smail, Ian, ..., **Thomson, A. P.** , et al., 2018, MNRAS, 479, 3879

17. A machine-learning method for identifying multi-wavelength counterparts of submillimeter galaxies: training and testing using AS2UDS and ALESS

An., F., Stach, S. M., Smail, Ian, ..., **Thomson, A. P.** , et al., 2018, ApJ, 862, 101

18. An ALMA Survey of the SCUBA-2 Cosmology Legacy Survey UKIDSS/UDS fields: identifying candidate $z \sim 4.5$ [CII] emitters

Cooke, E. A., Smail, Ian, Swinbank, A. M., ..., **Thomson, A. P.** , et al., 2018, ApJ, 861, 100

19. An ALMA survey of the SCUBA-2 Cosmology Legacy Survey UKIDSS/UDS fields: number counts of submillimetre galaxies

Stach, S. M., Smail, Ian, Swinbank, A. M., ..., **Thomson, A. P.** et al., 2018, ApJ, 860, 161

20. The dust and [CII] morphologies of $z \sim 4.5$ SMGs at ~ 250 pc resolution: the absence of large clumps in the ISM of high-redshift galaxies

Gullberg, B., Swinbank, A. M., Smail, Ian, ..., **Thomson, A. P.** , et al., 2018, ApJ, 859, 12

21. Storm in a Teacup: X-Ray View of an Obscured Quasar and Superbubble

Lansbury, G. B., Jarvis, M. E., Harrison, C. M., Alexander, D. M., Del Moro, A., Edge, A. C., Mullaney, J. R., **Thomson, A. P.**, 2018, ApJ, 856, 1

22. The eMERGE Survey - I: Very Large Array 5.5 GHz observations of the GOODS-North Field

Guidetti, D., Bondi, M., Prandoni, I., ..., **Thomson, A. P.** , et al., 2017, MNRAS, 471, 210

23. The AT-LESS CO(1-0) survey of submillimetre galaxies in the Extended Chandra Deep Field South: First results on cold molecular gas in galaxies at $z \sim 2$

Huynh, M T., Emonts, B. H. C., Kimball, A. E., ..., **Thomson, A. P.** et al., 2017, MNRAS, 467, 1222

24. The SCUBA-2 Cosmology Legacy Survey: Multi-wavelength Properties of ALMA-identified submillimeter galaxies in UKIDSS-UDS

Simpson J. M., Smail, Ian, Swinbank, A. M., ..., **Thomson, A. P.** , et al., 2017, ApJ, 839, 58

†**25. Evolution of dust-obscured star formation and gas since z=2.2 from HiZELS**

Thomson, A. P., Simpson, J. M., Smail, Ian, Swinbank, A. M., Best, P. N., Sobral, D., Geach, J. E., Ibar, E., Johnson, H. L., 2017, ApJ, 838, 119

26. The SCUBA-2 Cosmology Legacy Survey; 850 μm maps, catalogues and number counts

Geach, J. E., Dunlop, J. S., Halpern, M., ,..., **Thomson, A. P.** , et al., 2016, MNRAS, 465, 1789

27. The growth of typical star-forming galaxies and their super massive black holes across cosmic time

Calhau, J., Sobral, D., Stroe, A., Best, P. N., Smail, Ian, Lehmer, B, Harrison, C.M., **Thomson, A. P.**, 2017, MNRAS, 464, 303

28. The SCUBA-2 Cosmology Legacy Survey: ALMA resolves the bright-end of the sub-millimeter number counts

Simpson, J. M., Smail, I., Swinbank, A. M., ..., **Thomson, A. P.** et al., 2015, ApJ, 807, 128

29. Dusty Starbursts and the Formation of Elliptical Galaxies: A SCUBA-2 Survey of a $z = 1.46$ cluster

Ma, C.-J, Smail, Ian, Swinbank, A. M., Simpson, J. M., **Thomson, A. P.**, et al., 2015, ApJ, 806, 257

30. An ALMA Survey of Sub-millimeter Galaxies in the Extended Chandra Deep Field South: Physical Properties Derived from Ultraviolet-to-radio Modeling

de Cunha, E., Walter, F., Smail, Ian, ..., **Thomson, A. P.**, 2015, ApJ, 806, 110

†**31. Tracing cool molecular gas and star formation on ∼100 pc scales in a $z = 2.3$ galaxy**

Thomson, A. P., Ivison, R. J., Frazer N. Owen, Danielson, A. L. R., Swinbank, A. M., Ian Smail, 2015, MNRAS, 448, 1874

△**32. Storm in a "Teacup": a radio-quiet quasar with ∼10 kpc radio-emitting bubbles and extreme gas kinematics**

Harrison, C. M., **Thomson, A. P.**, Alexander, D. M., Bauer, F. E., Edge, A. C., Hogan, M. T., Mullaney, J. R., Swinbank, A. M., 2015, ApJ, 800, 45

33. The SCUBA-2 Cosmology Legacy Survey: ALMA Resolves the Rest-frame Far-infrared Emission of Sub-millimeter Galaxies

Simpson, J. M, Smail, I., Swinbank, A. M., ..., **Thomson, A. P.** , et al., 2015, ApJ, 799, 81

†34. An ALMA survey of submillimetre galaxies in the Extended Chandra Deep Field South: radio properties and the far-infrared/radio correlation

Thomson, A. P., Ivison, R. J., Simpson, J. M., Swinbank, A. M., Smail, Ian, Arumugam, V., Alexander, D. M., Beelen, A., Brandt, W. N., Chandra, I., Dannerbauer, H., Greve, T. R., Hodge, J. A., Ibar, E., Karim, A., Murphy, E. J., Schinnerer, E., Sirothia, S., Walter, F., Wardlow, J. L., van der Werf, P., 2014, MNRAS, 442, 577

35. An ALMA Survey of Submillimeter Galaxies in the Extended Chandra Deep Field South: The Redshift Distribution and Evolution of Submillimeter Galaxies

Simpson, J. M., Swinbank, A. M., Smail, I., ..., **Thomson, A. P.** , et al., 2014, ApJ, 788, 125

36. An ALMA Survey of Submillimetre Galaxies in the Extended Chandra Deep Field South: The Far-Infrared Properties of SMGs

Swinbank, A. M., Simpson, J. M., Smail, Ian, ..., **Thomson, A. P.** et al., 2014, MNRAS, 438, 1267

37. The SCUBA-2 Cosmology Legacy Survey: Ultraluminous Star-forming Galaxies in a $z = 1.6$ Cluster

Smail, Ian, Geach, J. E., Swinbank, A. M., ..., **Thomson A. P.** et al., 2014, ApJ, 782, 19

38. A dust-obscured massive maximum-starburst galaxy at a redshift of 6.342

Riechers, Dominik A., Bradford, C. M., Clements, D. L., ..., **Thomson, A. P.** et al., 2013, Nature, 496, 7445

39. VLA mapping of the CO(1-0) line in SMM J14011+0252

Sharon, C. E., Baker, A. J., Harris, A. I., **Thomson, A. P.**, 2013, ApJ, 765, 1

†40. VLA imaging of ^{12}CO $J=1-0$ and free-free emission in lensed submillimetre galaxies

Thomson, A. P., Ivison, R. J., Smail, Ian, Swinbank, A. M., Weiss, A., Kneib, J. P, Papadopoulos, P. P., Baker, A. J., Sharon, C. E., van Moorsel, G. A., 2012, MNRAS, 425, 2203

41. The interstellar medium in distant star-forming galaxies: turbulent pressure, fragmentation and cloud scaling relations in a dense gas disk at $z = 2.3$

Swinbank, A. M., Papadopoulos, P. P., Cox, P., Krips, M., Ivison, R. J., Smail, Ian, **Thomson, A. P.**, Neri, R., Richard, J., Ebeling, H., 2011, ApJ, 747, 11

42. Tracing the molecular gas in distant submillimetre galaxies via CO(1-0) imaging with the Expanded Very Large Array

Ivison, R. J., Papadopoulos, P. P., Smail, Ian, Greve, T. R., **Thomson, A. P.**, Xilouris, E. M., Chapman, S. C., 2011, MNRAS, 412, 1913