

Karen L. Masters

CONTACT INFORMATION Institute of Cosmology and Gravitation *Voice:* +44 (0)23 9284 3137
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RESEARCH APPOINTMENTS **Institute of Cosmology and Gravitation, University of Portsmouth, UK**
Reader in Astronomy and Astrophysics (equiv. Associate Prof.) **Sept 2015 - 2014-2015**
Senior Lecturer (equiv. Assistant Prof.) **2012-2014**
University Research Fellow **2010-2012**
Leverhulme Early Career Research Fellow (with Bob Nichol) **2008-2010**
The 2008 Peter and Patricia Gruber Foundation IAU Fellow (with Bob Nichol) **2008-2010**
. (maternity leave Feb-Sep 2010)

Harvard-SAO Center for Astrophysics, Cambridge, MA, USA
Smithsonian Visiting Scientist (with Andrés Jordán) **July/Aug 2008**
Harvard Postdoctoral Research Fellow (with John Huchra) **Sept 2005- June 2008**
. (maternity leave Mar-Jun 2007)

EDUCATION Ph.D in Astronomy, **Cornell University**, Ithaca, NY, USA **August 2005**
Thesis: *Galaxy flows in and around the Local Supercluster*, (Advisor: Martha Haynes)
M.S. in Astronomy **Cornell University**, Ithaca, NY, USA **January 2003**
B.A. in Physics (1st Class, Top of B.A. class), **Oxford University**, Oxford, UK **June 2000**

RECENT HONOURS AND AWARDS

- Elected SDSS-IV Spokeperson (July 2016)
- Named SDSS-IV “Architect” (2014).
- Winner, Women of the Future: Science 2014 (for “women who are shaping Britain’s future”).
- One of the “100 Women” of 2014, by the BBC.
- Early Career Fellowship from The Leverhulme Trust (2010-2012; 50% salary support plus £6k/yr)
- Gave one of the four “Invited Discourses” (evening plenary talks) at the Beijing 2012 General Assembly of the International Astronomical Union.
- Winner, 2008 International Astronomical Union Fellowship (from Gruber Foundation, \$50,000)

RECENT FIRST AUTHOR PUBLICATIONS

1. *Science Learning via Participation in Online Citizen Science*, **Karen Masters** et al. 2016, Journal of Science Communication, 15, 3.
2. *2MTF III. HI 21cm observations of 1194 spiral galaxies with the Green Bank Telescope*, **Karen L. Masters** et al. 2014, MNRAS 443, 1044.
3. *Galaxy Zoo and ALFALFA: Atomic Gas and the Regulation of Star Formation in Barred Disc Galaxies*, **Karen L. Masters** et al. 2012, MNRAS 424, 2180 (43 citations)
4. *The Morphology of Galaxies in the Baryon Oscillation Spectroscopic Survey*, **Karen L. Masters** et al., 2011, MNRAS 418, 1055 (46 ADS citations).
5. *Galaxy Zoo: Bars in Disk Galaxies* **Karen L. Masters** et al., 2011 MNRAS 411, 2026 (89 ADS citations).
6. *Galaxy Zoo: Passive Red Spirals* **Karen L. Masters** et al., 2010, MNRAS 405, 783 (113 ADS citations).

Summary: **79 publications in peer reviewed journals (including 13 first author, 10 second author). Combined total of over 7000 citations (from ADS; Astrophysics Data System), h-index=36.**

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SELECTED

RESEARCH

TALKS/SEMINARS

Invited Conference Talks:

Conference Summary, The Changing Faces of Galaxies, Tasmania, Australia, Sept 2016 — Invited Plenary, SDSS-IV Collaboration Meeting, Madison, WI, USA, June 2016 — “Sharing One Sky: SDSS, APOGEE and Astronomy Outreach, Chile, May 2016 — UK Dark Energy Strategy Meeting, RAS, London, Jan 2016 — FM19 of the IAU General Assembly, Honolulu, Hawaii, USA, Aug 2015 — Plenary, SDSS Collaboration Meeting, Madrid, Spain, Jul 2015 — The Many Pathways to Galaxy Growth, Prato, Italy, Jun 2015 — Kavli Workshop on Citizen Science, Oxford, UK, Apr 2015 — RAS Ordinary Meeting, London, Mar 2015 — Chinese SDSS-VI Collaboration, NAOC, Beijing, China, Nov 2014 — Plenary, Sloan Digital Sky Survey Collaboration Meeting, Utah, USA, Jul 2014 — Plenary, Morphology in the Era of Large Surveys (ESO Workshop), Chile, Nov 2013 — Plenary, Evolutionary Paths in Galaxy Morphology, Sydney, Australia, Sept 2013 — Plenary, Cosmic Flows Meeting, Marseille, France, Jun 2013 — IAU SpS15: Data Intensive Astronomy, Beijing, China, Aug 2012 — Invited Discourse, 28th GA of IAU, Beijing, China, Aug 2012.

Collquia/Seminars:

Oxford, Oct 2016 — Southampton, May 2016 — AMNH, NY, Mar 2016 — Kent, Feb 2016 — UCL, Oct 2015 — Adler Planetarium, Chicago, Mar 2015, Leicester, Jan 2015 — Caltech, Aug 2014 — Imperial College, London, May 2014 — Geneva Observator, Mar 2014 — Academia Sinica, Taiwan, Mar 2014 — Arcetri Observatory, Florence, Feb 2014 — Exeter, Oct 2013 — UCLan, Mar 2012 — Sussex, Jan 2013 — Surrey, Dec 2012 — UCL, Oct 2012 — Cambridge, Nov 2011.

OTHER ACTIVITIES AND SKILLS

Spokesperson for SDSS-IV Collaboration (July 2016-2019). Elected position at leader of the scientific collaboration which has over 200 members at more than 30 institutions worldwide.

Project Scientist for Galaxy Zoo - leading professional science team behind the citizen science project.

PhD Supervisor for: Tim Lingard (2016-), Lucy Newnham (2015-), Dr. Tom Melvin (PhD, 2016).

Undergraduate Teaching: *Mathematical Physics* (2011, 2014); *Space Science and Applications of Physics* (2015, 2016); *Computational Physics* (2016)

Summer Student Supervision as part of The Ogden Trust Summer Research Scholarships, SEPnet (South East Physics Network) Summer Placement Scheme, SDSS-IV REU Scheme.

Author: “Mary Somerville and the Mechanism of the Heavens”, in “More Passion for Science: Journeys into the Unknown” (an anthology of stories of women in STEM).

TV-radio credits for astronomy outreach include Sky at Night (*Impacts*, June 2014; *Secrets of the Whirlpool Galaxy*, June 2016), Frequent guest on BBC Radio 4 *The Today Show*, BBC Radio Solent, also BBC World Service, Radio 5 Live, ExpressFM.

Outreach co-ordinator for ICG, Portsmouth, with responsibility for outreach budget, tracking impact of outreach. Line manager and mentor for ICG outreach officer, Dr. Jennifer Gupta.

Frequent contributor to micro-outreach through new media sources. I have more than 4k followers on Twitter (@KarenLMasters) where I tweet about astronomy/science.

Invited contributor of: Phys. Rev. Lett. Viewpoint: *Testing Gravity in Gas Rich Galaxies*, **Karen L. Masters** & Kristine Spekkens, 2011

Co-author of: *Asking Gender Questions*, Astronomy & Geophysics, Vol 55, Dec 2014. A study of the gender balance of astronomers asking questions at the UK National Astronomy Meeting.

Member of University of Portsmouth Athena SWAN panel, and Portsmouth Physics Project Juno/Athena SWAN Panels. Started mentoring program for Portsmouth post-16 girls studying physics.

Co-I of EPSRC funded “VOLCROWE”, studying the economics and sociology of online volunteers. Co-I of Innovate:UK funded “Crowdsourcing Landscape Change” knowledge transfer project.

Member: Royal Astronomical Society, American Astronomical Society, International Astronomical Union.

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FULL PUBLICATION LIST *Summary: 79 publications in peer reviewed journals (including 13 first author, 10 second author). Combined total of over 7000 citations (from ADS; Astrophysics Data System), h-index=36.*

- REFEREED PUBLICATIONS (FIRST AUTHOR OR SIGNIFICANT INVOLVEMENT)
- 2016 26. *SDSS-IV MaNGA: faint quenched galaxies - I. Sample selection and evidence for environmental quenching* Samantha Penny, **Karen L. Masters** et al. 2016, MNRAS 462, 3955.
25. *Science Learning via Participation in Online Citizen Science*, **Karen Masters** et al. 2016, Journal of Science Communication, 15, 3.
- 2014 24. *Galaxy Zoo: CANDELS barred discs and bar fractions*, Brooke Simmons, Tom Melvin, Chris Lintott, **Karen L. Masters** et al. 2014, MNRAS 445, 3466
23. *2MTF III. HI 21cm observations of 1194 spiral galaxies with the Green Bank Telescope*, **Karen L. Masters** et al. 2014, MNRAS 443, 1044.
22. *Galaxy Zoo: an independent look at the evolution of the bar fraction over the last eight billion years from HST-COSMOS*, Tom Melvin, **Karen L. Masters** et al. 2014, MNRAS 438, 2882 (20 ADS citations).
- 2013 21. *Galaxy Zoo: Observing Secular Evolution through Bars*, Edmond Cheung, Lia Athanassoula, **Karen L. Masters** et al. 2013, ApJ, 779, 162 (26 ADS citations).
20. *Galaxy Zoo 2: detailed morphological classifications for 304,122 galaxies from the Sloan Digital Sky Survey*, Kyle W. Willett, Chris J. Lintott, Steven P. Bamford, **Karen L. Masters**, et al. 2013, MNRAS 435, 2835
19. *2MTF II: New Parkes 21cm observations of 303 southern galaxies*, Hong Tao, Lister Stavelly-Smith, **Karen L. Masters** et al., 2013, MNRAS 432, 1178
18. *The Different Star Formation Histories of Red and Blue Spirals and Ellipticals*, Rita Tojeiro, **Karen L. Masters** et al., 2013, MNRAS 432, 359 (20 ADS citations).
- 2012 17. *Galaxy Zoo and ALFALFA: Atomic Gas and the Regulation of Star Formation in Barred Disc Galaxies*, **Karen L. Masters** et al. 2012, MNRAS 424, 2180. (32 ADS citations)
16. *The fraction of early-type galaxies in low redshift groups and clusters of galaxies*, Ben Hoyle, **Karen L. Masters**, Robert C. Nichol, Raul Jimenez & Steven P. Bamford, 2012, MNRAS 423, 3478.
15. *Galaxy Zoo: The Environmental Dependence of Bars and Bulges in Disc Galaxies*, Ramin Skibba, **Karen L. Masters**, Robert C. Nichol et al. 2012, MNRAS, 423, 1485 (42 ADS citations)
14. *The 2MASS Redshift Survey - Description and Data Release*, John P. Huchra, Lucas M. Macri, **Karen L. Masters**, et al., 2012, ApJS 199, 26 (153 ADS citations)
- 2011 13. *The Morphology of Galaxies in the Baryon Oscillation Spectroscopic Survey*, **Karen L. Masters**, Claudia Maraston, Robert C. Nichol, et al. 2011, MNRAS 418, 1055 (39 ADS citations)
12. *Galaxy Zoo: Bar Lengths in Local Disk Galaxies*, Ben Hoyle, **Karen L. Masters**, Robert C. Nichol, et al. 2011 MNRAS 415, 3627 (31 ADS citations)
11. *Galaxy Zoo: Bars in Disk Galaxies*, **Karen L. Masters**, Robert C. Nichol, Ben Hoyle, et al. 2011 MNRAS 411, 2026 (76 ADS citations)
- 2010 10. *Galaxy Zoo: Passive Red Spirals*, **Karen L. Masters**, Moein Mosleh, A. Kathy Romer, Robert C. Nichol, et al. 2010, MNRAS 405, 783 (94 ADS citations).
9. *The ACS Fornax Cluster Survey VII: Half Light Radii of Globular Clusters in Early-Type Galaxies*, **Karen L. Masters**, Andrés Jordán, et al. 2010, ApJ 715, 1419. (33 ADS citations)
8. *Galaxy Zoo: Dust in Spiral Galaxies* **Karen L. Masters**, Robert C. Nichol, et al. 2010, MNRAS 404, 792 (69 ADS citations).

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- 2008 7. *2MTF I: The Tully-Fisher Relation in the 2MASS J, H and K-bands*
Karen L. Masters, C. M. Springob & J. P. Huchra. 2008, AJ 135, 1738 (48 ADS citations).
6. *Geometric Tests of Cosmological Models: II. Calibration of Rotational Widths and the Tully-Fisher Relation*, A. Saintonge, **Karen L. Masters**, C. Marinoni, K. Spekkens, R. Giovanelli, & M.P. Haynes. 2008, A&A 478, 57
- 2007 5. *SFI++ II: A New I-band Tully-Fisher Catalog, Derivation of Peculiar Velocities and Dataset Properties*, Christopher M. Springob, **Karen L. Masters**, M.P. Haynes, R. Giovanelli & C. Marinoni. 2007, ApJS 172, 599 (131 ADS citations).
- 2006 4. *SFI++ I: A New I-band Tully-Fisher Template, the Cluster Peculiar Velocity Disp. and H_0*
Karen L. Masters, C.M. Springob, M.P. Haynes & R. Giovanelli. 2006, ApJ 653, 861 (100 ADS citations).
- 2004 3. *The Impact of Distance Uncertainties on Local Luminosity and Mass Functions*
Karen L. Masters, M.P. Haynes and R. Giovanelli, 2004, ApJ 607, L115 (27 ADS citations).
- 2003 2. *Internal Extinction in Spiral Galaxies in the Near-Infrared*.
Karen L. Masters, R. Giovanelli, and M.P. Haynes, 2003, AJ 126, 158 (64 ADS citations).
- 2000 1. *The Elliptical Galaxy Formerly Known as the Local Group: merging the globular cluster systems*, D.A. Forbes, **Karen L. Masters**, D. Minniti, and P. Barmby, 2000, A&A 358, 471 (39 ADS citations).

OTHER
REFEREED
PUBLICATIONS

- 2016 53. *Galaxy Zoo: Evidence for rapid, recent quenching within a population of AGN host galaxies*, Smethurst et al. (including **Karen L. Masters**), 2016, MNRAS in press.
- 52 *The XMM Cluster Survey: The Halo Occupation Number of BOSS galaxies in X-ray clusters*, Mehrrens et al. (including **Karen L. Masters**), 2016, MNRAS 463, 1929.
- 51 . *SDSS-IV MaNGA: properties of galaxies with kinematically decoupled stellar and gaseous components* Jin et al. (including **Karen L. Masters**), 2016, MNRAS 463, 913
- 50 . *Galaxy Zoo: comparing the demographics of spiral arm number and a new method for correcting redshift bias* Hart et al. (including **Karen L. Masters**), 2016, MNRAS 461, 3663
- 49 *The Data Reduction Pipeline for the SDSS-IV MaNGA IFU Galaxy Survey* Law et al. (including **Karen L. Masters**) 2016, AJ, 152, 83
- 48 *SDSS IV MaNGA - spatially resolved diagnostic diagrams: a proof that many galaxies are LIERs* Belfiori et al. (including **Karen L. Masters**) 2016 MNRAS 461, 3111.
- 47 *Suppressing star formation in quiescent galaxies with supermassive black hole winds* Cheung et al. (including **Karen L. Masters**) 2016, Nature, 533, 504.
46. *2MTF - V. Cosmography, β , and the residual bulk flow*, Chris Springob, Tao Hong, Lister Stavelly-Smith, **Karen Masters** et al. 2016, MNRAS 456, 1886.
45. *SDSS-III Baryon Oscillation Spectroscopic Survey Data Release 12: galaxy target selection and large-scale structure catalogues*, Reid et al. (including **Karen L. Masters**) 2016, MNRAS 455, 1553.
- 2015 44. *Radio Galaxy Zoo: host galaxies and radio morphologies derived from visual inspection* Banfield et al. (including **Karen L. Masters**) 2015 MNRAS 453, 2326
43. *The Eleventh and Twelfth Data Releases of the Sloan Digital Sky Survey: Final Data from SDSS-III*, Alam et al. (SDSS-III Collaborating in alphabetical order, including **Karen L. Masters**), 2015, ApJS, 219, 12 (147 ADS citations)
42. *Stellar Populations of Barred Quiescent Galaxies*, Cheung et al. (including **Karen L. Masters**) 2015, ApJ 807, 36.
41. *Galaxy Zoo: evidence for diverse star formation histories through the green valley*, Smethurst et al. (including **Karen L. Masters**) 2015, MNRAS 450, 435.

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- 2016 40. *Galaxy Zoo: the dependence of the star formation-stellar mass relation on spiral disc morphology* Kyle Willett, Kevin Schawinski, Brooke Simmons, **Karen L. Masters** et al. 2015 MNRAS 499, 820.
39. *P-MaNGA: full spectral fitting and stellar population maps from prototype observations* Wilkinson et al. (including **Karen L. Masters**) 2015, MNRAS 449, 328
38. *P-MaNGA: Gradients in Recent Star Formation Histories as Diagnostics for Galaxy Growth and Death* Li et al. (including **Karen L. Masters**) 2015, ApJ 804, 125.
37. *Galaxy Zoo: the effect of bar-driven fuelling on the presence of an active galactic nucleus in disc galaxies* Galloway et al. (including **Karen L. Masters**) 2015, MNRAS 448, 3442.
36. *Misalignment between cold gas and stellar components in early-type galaxies*, Wong et al. (including **Karen L. Masters**) 2015 447, 3311.
35. *Overview of the SDSS-IV MaNGA Survey: Mapping Nearby Galaxies at Apache Point Observatory*, Kevin Bundy et al. (MaNGA science team, including **Karen L. Masters**), 2015 ApJ 798, 7.
- 2015 34. *Galaxy Zoo: Are Bars Responsible for the Feeding of Active Galactic Nuclei at $0.2 < z < 1.0$?*, Edmond Cheung et al. (including **Karen L. Masters**), 2015 MNRAS 447, 506.
- 2014 33. *P-MaNGA Galaxies: Emission Lines Properties - Gas Ionisation and Chemical Abundances from Prototype Observations*, Francesco Belfiore et al. (including **Karen L. Masters**), 2014 MNRAS 449, 867
32. *2MTF - IV. A bulk flow measurement of the local Universe*, Tao Hong, Chris Springob, Lister Staveley-Smith, Morag Scrimgeour, **Karen L. Masters**, Lucas Macri, Baerbel Koribalski, Heath Jones, Tom Jarrett. 2014 MNRAS 445, 402
31. *HighMass - High HI Mass, HI-rich Galaxies at $z \sim 0$: High-Resolution VLA Imaging of UGC 9037 and UGC 12506*, Gregory Hallenbeck et al. (including **Karen L. Masters**), AJ, 148, 69
30. *HighMass-High H I Mass, H I-rich Galaxies at $z \sim 0$ Sample Definition, Optical and H α Imaging, and Star Formation Properties*, Shan Huang et al. (including **Karen L. Masters**), ApJ 793, 40.
29. *Redshift evolution of the dynamical properties and dark matter fractions of SDSS-III/BOSS galaxies*, Alessandra Beifiori et al. (including **Karen L. Masters**), 2013 ApJ, 789, 92
28. *The green valley is a red herring: Galaxy Zoo reveals two evolutionary pathways towards quenching of star formation in early- and late-type galaxies*, Kevin Schawinski et al. including **Karen L. Masters**, MNRAS 440, 889
- 27 *The Tenth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the SDSS-III Apache Point Observatory Galactic Evolution Experiment*, Ahn et al. for the SDSS-III collaboration (including **Karen L. Masters**), ApJS 211, 17 (385 citations).
- 2013 26. *Stellar masses of SDSS-III BOSS galaxies at $z \sim 0.5$ and constraints to galaxy formation models*, Claudia Maraston et al. (including **Karen L. Masters**), 2013 MNRAS 435, 2764
25. *WISE TF: A Mid-infrared, 3.4 μ m Extension of the Tully-Fisher Relation Using WISE Photometry*, David J. Lagutta et al. (including **Karen L. Masters**), 2013 ApJ 771, 88
24. *Galaxy Zoo: Bulgeless Galaxies with Growing Black Holes*, Brooke Simmons et al. (including **Karen L. Masters**), 2013, MNRAS 429, 2199
23. *Galaxy Zoo: Quantifying Morphological Indicators of Galaxy Interaction*, Kevin Casteels, Steven P. Bamford, Ramin A. Skibba, **Karen L. Masters** et al. 2013, MNRAS 429, 1051
22. *Galaxy Zoo: A Catalogue of Overlapping Galaxy Pairs for Dust Studies* William C. Keel, Anna M. Manning, Benne W. Holwerda, Massimo Mezzoprete, Chris J. Lintott, Kevin Schawinski, Pamela Gay and **Karen L. Masters**. 2013, PASP 125, 2

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- 2013 21. *The Baryon Oscillation Spectroscopic Survey of SDSS-III*, Kyle Dawson et al. (including **Karen L. Masters**), 2013 AJ 145, 10 (440 ADS citations)
- 2012 20. *SYNMAGS: A Fast Tool for Catalog-Level Matched Photometry*, Kevin Bundy, et al. (including **Karen L. Masters**) 2012 AJ 144 188
19. *The progenitors of present-day massive red galaxies up to $z \sim 0.7$ - finding passive galaxies using SDSS-I/II and SDSS-III*, Rita Tojeiro, Will Percival et al. (including **Karen L. Masters**). 2012, MNRAS 424, 136
18. *Galaxy Zoo: Dust and molecular gas in early-type galaxies with prominent dust lanes*, Sugata Kaviraj, et al. (inc. **Karen L. Masters**) 2012, MNRAS 423, 49
17. *Galaxy Zoo: Building the Low-Mass End of the Red Sequence with Local Post-starburst galaxies* O. Ivy Wong et al., (including **Karen L. Masters**) 2012 MNRAS 420, 1684
- 2011 16. *Ameliorating Systematic Uncertainties in the Angular Clustering of Galaxies: A Study using SDSS-III*, Ashley J. Ross, Shirley Ho, Antonio J. Cuesta, Rita Tojeiro, Will J. Percival, David Wake, **Karen L. Masters** et al. 2011, MNRAS 417, 1350 (66 ADS citations)
- 2011 15. *SDSS-III: Massive Spectroscopic Surveys of the Distant Universe, the Milky Way Galaxy and Extra-Solar Planetary Systems*. Daniel Eisenstein et al. (SDSS-III collaboration inc. **Karen L. Masters**). 2011 AJ 142, 72 (665 ADS citations)
14. *Grand Design and Flocculent Spirals in the Spitzer Survey of Stellar Structure in Galaxies*, Debra M. Elmegreen et al. (including **Karen L. Masters**). 2011, ApJ 737, 32
13. *HI Content and Optical Properties of Field Galaxies from the ALFALFA Survey. I. Selection of a Control Sample* M. Carmen Toribio, José M. Solanes, Riccardo Giovanelli, Martha P. Haynes & **Karen L. Masters** 2011 AJ 732, 92.
12. *The Eighth Data Release of the Sloan Digital Sky Survey: First Data from SDSS-III* Hiroaki Aihara et al. (SDSS-III collaboration in alphabetical order, including **Karen L. Masters**). 2011 ApJS, 193, 29 (686 ADS citations)
11. *Local Gravity versus Local Velocity: Solutions for β and nonlinear bias* Marc Davis, Adi Nusser, **Karen L. Masters**, Christopher Springob, John P. Huchra, Gerard Lemson. 2011 MNRAS 413, 2906 (46 ADS citations)
10. *Galaxy Zoo 1 : Data Release of Morphological Classifications for nearly 900,000 galaxies* Chris Lintott, et al. (Galaxy Zoo team including **Karen L. Masters**) 2011 MNRAS 410, 166. (166 ADS citations)
- 2010 9. *The Spitzer Survey of Stellar Structure in Galaxies (S^4G)* Kartik Sheth et al. (including **Karen L. Masters**). 2010 PASP 122, 1397 (135 ADS citations)
8. *Mid-Infrared Galaxy Morphology from S^4G : The Imprint of the de Vaucouleurs Revised Hubble-Sandage Classification System at 3.6 microns* Ronald J. Buta et al. (including **Karen L. Masters**) 2010 ApJS 190, 147 (35 ADS citations).
7. *Galaxy Zoo: The Fundamentally Different Co-Evolution of Supermassive Black Holes and their Early- and Late-Type Host Galaxies*, Kevin Schawinski, C. Megan Urry, et al. (including **Karen L. Masters**) 2010, ApJ 711, 284 (107 ADS citations).
- 2008 6. *Geometric Tests of Cosmological Models: III. The Cosmology-Evolution Diagram at $z=1$* , C. Marinoni, A. Saintonge, et al. (including **Karen L. Masters**) 2008, A&A 478, 71
5. *Geometric Tests of Cosmological Models: I. Probing Dark Energy Using the Kinematics of High Redshift Galaxies*, C. Marinoni, A. Saintonge, R. Giovanelli, M.P. Haynes, **Karen L. Masters**, O. Le Fevre, A. Mazure, P. Taxil & J.-M. Virey. 2008, A&A 478, 43
- 2007 4. *Groups of Galaxies in the Two Micron All-Sky Redshift Survey* A.C. Crook, J.P. Huchra, N. Martimbeau, **Karen L. Masters**, T. Jarrett & L.M. Macri. 2007, ApJ 655, 790 (67 ADS citations).

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- 2007 3. *The Arecibo Legacy Fast ALFA Survey III: HI Source Catalog of the Northern Virgo Cluster*
R. Giovanelli, M.P. Haynes, et al. (including **Karen L. Masters**) 2007, AJ 133, 2569 (121 ADS citations).
- 2005 2. *The Arecibo Legacy Fast ALFA Survey II: Results of Precursor Observations*
R. Giovanelli, M.P. Haynes et al. (including **Karen L. Masters**) 2005, AJ 130, 2598 (56 ADS citations).
1. *The Arecibo Legacy Fast ALFA Survey I: Science Goals, Survey Design and Strategy*
R. Giovanelli, M.P. Haynes et al. (including **Karen L. Masters**) 2005, AJ 130 2598 (330 ADS citations).

OTHER
PUBLICATIONS

- *Asking Gender Questions*, Jonathan Pritchard, **Karen Masters** et al., Astronomy & Geophysics, Vol 55, Dec 2014.
- *How is success defined and measured in online citizen science? A case study of Zooniverse projects*, Joe Cox, Eun-Young Oh, Brooke Simmons, Chris Lintott, **Karen Masters**, Anita Greenhill, Kate Holmes & Gary Graham 2014, CiSE Special Issue (submitted).
- *Playing with Science: Gamised Aspects of Gamification Found on the Online Citizen Science Project - Zooniverse*, Anita Greenhill, Kate Holmes, Chris Linott, Brooke Simmons, **Karen Masters**, Joe Cox, Gary Graham. 2014 (conf. proceedings).
- *Morphology in the era of large surveys*, Chris Lintott, **Karen L. Masters**, Brooke Simmons and Sugata Kaviraj, Astronomy & Geophysics, Vol 54, Oct 2013.
- *Invited Discourse: A Zoo of Galaxies*, **Karen L. Masters**, 2012, Highlights of Astronomy, Volume 16, Thierry Montmerle ed.
- *Revealing Galactic Scale Bars with the Help of Galaxy Zoo*, Karen L. Masters et al., 2012, Highlights of Astronomy, Volume 16, Thierry Montmerle ed.
- *Galaxy Zoo: Science and Outreach Hand-in-hand*, **Karen L. Masters** et al., 2012, Highlights of Astronomy, Volume 16, Thierry Montmerle ed.
- *Galaxy Zoo: Morphological Classification and Citizen Science*, Lucy Fortson, **Karen Masters**, Robert Nichol, et al. 2012, Chapter 11 of *Advances in Machine Learning and Data Mining for Astronomy*, CRC Press (arxiv: 1104.5513)
- *Testing Gravity in Gas Rich Galaxies*, **Karen L. Masters** & Kristine Spekkens, 2011, Phys. Rev. Lett. Invited Viewpoint on “Novel Test of Modified Newtonian Dynamics with Gas Rich Galaxies”, McGaugh, S. S., 2011 PRL 106, 121303
- *Black hole growth and host galaxy morphology*. Kevin Schawinski et al. (inc. **Karen L. Masters**) IAU Symp 267, ”Co-Evolution of Central Black Holes and Galaxies: Feeding and Feedback”, eds. B.M. Peterson, R.S. Somerville and T. Storchi-Bergmann (astro-ph/1002.1488).
- *Estimation of the Hubble Constant and Constraint on Descriptions of Dark Energy*. Lincoln Greenhill et al. (inc. **Karen L. Masters**), astro2010: The Astronomy and Astrophysics Decadal Survey, 2010, 103 (astro-ph/0902.4255).
- *The Local Velocity Field*. **Karen L. Masters**, AIP Conf. Proc., “The Evolution of Galaxies through the Neutral Hydrogen Window”, eds. A. Momjian, R. Minchin. Febuary 1-3 2008, Arecibo, (astro-ph/0803.3929).
- *Mapping Mass in the Local Universe*. **Karen L. Masters**, APS Conf. Proc. 395, p137, “Frontiers of Astrophysics, A Celebration of NRAO 50th Anniversary Science Symposium”, eds. A. Bridle, J. Condon, G. Hunt, June 18-21 2007, Charlottesville (astro-ph/0708.2913).
- *Multi-Wavelength Study of Galaxy Rotation Curves and its Application to Cosmology*. A. Sain-tonge et al. (inc **Karen L. Masters**). Proc. *The Fabulous Density of Galaxies: Bridging Past and Present*. Vth Marseille International Cosmology Conference, June 2005 (astro-ph/0510363).
- *Cosmology in the Very Local Universe: Why Flow Models Matter*. **Karen L. Masters**, Proc. of 22nd Texas Symposium of Relativistic Astrophysics at Stanford, Dec 2004. eds. P. Chen, E. Bloom, G. Madejski & V. Petrosian (astro-ph/0503271).

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REFEREES

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