Dr Angus H. Wright - DoB 19th April 1989

CONTACT German Centre for Cosmological Lensing (GCCL)

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ACADEMIC

REFERENCES (ALPHABETIC)

• Prof. Hendrik Hildebrandt: AIRUB Managing Director / hendrik@astro.rub.de / Astronomiches Institute, Ruhr-Universität Bochum, Universitätsstr. 150, 44780 Bochum, NRW, Germany. / +49 234 32 24019

• Prof. Catherine Heymans: GCCL Director / heymans@roe.ac.uk / Institute for Astronomy, University of Edinburgh, Royal Observatory, Blackford Hill, Edinburgh EH9 3HJ, UK. / +44 131 668 8301

ACADEMIC Websites

• https://orcid.org/0000-0001-7363-7932

• www.researchgate.net/profile/Angus_Wright3

RESEARCH Interests

- Data intensive astronomy, and exploration of optimal methods/algorithms/approaches for analysis of future legacy surveys.
- Astrostatistics, machine learning methods and their application in an astronomical context, Bayesian statistics.
- Developing algorithms for optimised photometric redshift estimation and calibration for cosmic shear tomography.
- Photometric methods and optimisation of imaging analysis in large imaging surveys, ongoing and upcoming.
- Development and application of modern image reduction methods for wide-field imaging surveys, ongoing and upcoming.
- Development and application of algorithms for measurement of multi-wavelength photometry of extragalactic sources, and the measurement of galaxy spectral energy distributions (SEDs).
- Optimising cosmological parameter estimation from weak lensing tomography through mitigation of systematic effects.
- Studying the build-up of mass (baryonic and dark) in the universe and the evolution of mass functions (stellar, gas, and baryonic) over cosmic timescales.
- Blind HI studies of the local and high redshift universe.
- High-resolution Quasar Spectroscopy and the detection of high-redshift metalicities and isotropic abundances.
- \bullet Examination of variation in the fine structure constant α through analysis of quasar absorption systems.

EDUCATION University of Western Australia, WA, Australia

PhD, Astrophysics (Graduated Dec 2017)

- Thesis Title: Using Panchromatic Photometry and HI Surveys to constrain the Galactic Baryonic Mass Function
- Thesis Topic: Deriving an empirical measurement of the galactic baryonic mass function using the unique GAMA dataset, by first optimising photometric estimation, HI flux extraction, and measuring the low-redshift stellar and HI mass functions.
- Supervisors:

Professor Simon P. Driver

Assoc. Prof. Aaron S.G. Robotham

Assoc. Prof. Martin Meyer

• Area of Study: Extra-Galactic Astronomy, Photometric Methods, Astrostatistics

University of NSW, NSW, Australia

MPhil, Astrophysics (Graduated Mar 2013)

- Thesis Title: Empirical Analysis of Magnesium Isotopic Abundances through Quasar Spectroscopy
- Thesis Topic: Using high-resolution quasar spectroscopy to estimate the impact of detectable Magnesium isotopic abundances on analyses of variation in the fine structure constant α.
- Supervisor: Professor John Webb
- Area of Study: Extra-Galactic Astronomy, Quasar Spectroscopy, Cosmology

BSci, Physics (Graduated Mar 2011)

- Included award of B.L. Turtle Memorial Prize for Astrophysics (2011)
- Included Senior Thesis project
- Thesis Title: Optimal Quasar Selection for studies of Variation in the Fine Structure Constant α
- Thesis Topic: Identification and selection of optimal quasar candidates for spectroscopic follow-up in studies of variation in the fine structure constant α .
- Supervisor: Professor John Webb
- Area of Study: Extra-Galactic Astronomy, Cosmology

PROFESSIONAL **German Centre for Cosmological Lensing**, Ruhr-Universität Bochum, Bochum, Ger-EXPERIENCE many

Research Fellow, 2 years funding (July 2021 to May 2023)

German Centre for Cosmological Lensing, Ruhr-Universität Bochum, Bochum, Germany

Research Fellow, 3 years funding (June 2018 to July 2021)

Rheinische Friedrich-Wilhelms-Universität Bonn, Bonn, Germany

Post-Doctoral Researcher, 3 years funding (Oct 2016 to Oct 2019)

University of Western Australia, Perth, Australia

APA and UWA funded PhD Student, 3 years funding (Mar 2013 to Mar 2016)

University of NSW, Sydney, Australia

Lab Demonstrator-in-Charge (Feb 2011 to Dec 2012)

University of NSW, Sydney, Australia

Lab Demonstrator (Feb 2010 to Feb 2011)

ACADEMIC EXPERIENCE

Grants

2013 to 2016

- Graduate Research School Local Travel Award (AUD\$750; 2015)
- Graduate Research School Overseas Travel Award (AUD\$1850; 2015)
- University of Western Australia Establishment Award (AUD\$2000; 2013)
- University of Western Australia Safety-Net Top-Up Scholarship (AUD\$12250; 2013)
- Australian Postgraduate Award (AUD\$86 286; 2013)

Collaborations: Project Leader

2015 to Present

- KiDS Redshift Calibration Working Group (co-Lead; 2019 to Present)
- KiDS Data Release 5 Project (Lead; 2018 to Present)
- KiDS-VIKING Photometry Working Group (Lead; 2016 to Present)
- GAMA-KiDS-VIKING Photometry Working Group (Lead; 2015 to 2018)

Collaborations: Project Member

2013 to Present

- Dark Energy Science Collaboration (Provisional Member; 2019 to Present)
- Legacy Survey of Space and Time (LSST) Collaboration (Provisional Member; 2019 to Present)
- Euclid Collaboration (2018 to Present)
- KiDS Consortium Member (2015 to Present)
- GAMA-WISE Matching Group (2014 to 2015)
- GAMA-H-ATLAS Matching Group (2014 to 2015)
- ALFALFA-GAMA Collaboration (2013 to 2015)
- GAMA Team Member (2013 to Present)

Scientific Organising Committee

2015 to Present

- 'Consensus Cosmic Shear in the 2020s', Busan, South Korea (IAU General Assembly Focus Meeting, 2022; co-Chair)
- 'Harley Wood School for Astronomy', Perth, Australia (2015; Chair)

Astronomical Society Committee

2015 to 2016

• Early Career Researcher Chapter Steering Committee, Astronomical Society of Australia, Australia (2015-2016; Postgraduate Representative)

Journal Referee 2016 to Present

- Astronomy and Astrophysics (A&A, 2018 to present)
- Monthly Notices of the Royal Astronomical Society (MNRAS, 2016 to present)

Lecturer 2011 to Present

- Lecturer for Introduction to Statistics for Physicists and Astronomers (AIRUB, Bochum, 2021 onwards)
- Contributing Lecturer for Cosmology on thermal history and galaxy evolution (AIRUB, Bochum, 2019 to Present)
- Contributing Lecturer for Lehrerfortbildung Astronomie (teacher development) on multiwavelength astronomy (AIfA, Bonn, 2018)
- Contributing Lecturer for Optical Observations on NIR astronomy (AlfA, Bonn, 2017 to 2019)
- Lecturer for HSC Physics, Matrix Education (Sydney, 2011 to 2012)

Tutor 2010 to Present

- Bayesian statistics and astrostatistics problems class tutor (ICRAR, UWA, 2014 to 2015)
- First year lab coordinator as Demonstrator-in-Charge (UNSW, 2011 to 2012)
- Tutor in first year astronomy (UNSW, 2011 to 2012)
- Tutor in general education astronomy (UNSW, 2010 to 2012)
- First year lab demonstration (UNSW, 2010 to 2012)
- Coach and Adjudicator for NSW GPS and AHGSS Debating (Sydney, 2010 to 2012)
- Tutor for HSC Mathematics, Physics, Chemistry at St Joseph's College (Sydney, 2010 to 2012)

Project Supervisor

2017 to Present

• Bachelors Project Supervisor, Niklas Kroschinski, "Improving KiDS-Legacy Photometric Redshift Estimation for Tomographic Weak Lensing", German Centre for Cosmological Lensing, Ruhr-Universität Bochum, Germany (2021)

- Bachelors Project Supervisor, Elena Marci-Boehncke, "Optimising Tomographic Bin Definitions for Cosmic Shear Cosmology with KiDS-Legacy", German Centre for Cosmological Lensing, Ruhr-Universität Bochum, Germany (2021)
- PhD Project Co-Supervisor, Jan Luca van den Busch, "Survey Inhomogeneities and Sample Variance in Cosmic Shear Experiments", German Centre for Cosmological Lensing, Ruhr-Universität Bochum, Germany (2020-2021)
- Masters Project Supervisor, Anna Wittje, "Improving KiDS-1000 Tomographic Crosscorrelation redshift estimates with PAUS", German Centre for Cosmological Lensing, Ruhr-Universität Bochum, Germany (2020-2021)
- Masters Project Supervisor, Anna Enders, "Studying Galaxy Evolution with Weak Gravitational Lensing in the Kilo-Degree Survey", German Centre for Cosmological Lensing, Ruhr-Universität Bochum, Germany (2019-2020)
- Bachelor Project Supervisor, Florian Klienebreil, "Detection of the Cluster Red Sequence using KiDS and VIKING Photometry", Argelander Institut für Astronomie, Universität Bonn, Germany (2017)

Meeting or Conference Organiser

2017 to Present

- 'Consensus Cosmic Shear in the 2020s', IAU General Assembly Focus Meeting, Busan, Korea (2022)
- KiDS Fall Consortium Meeting, Virtual (2020)
- KiDS Spring Consortium Meeting, Virtual (2020)
- KiDS Consortium Meeting, Bochum, Germany (2019)
- Euclid Consortium Meeting, Bonn, Germany (2017)

Outreach 2010 to Present

- Keynote Speaker for Astronomy on Tap Bonn, Bonn, Germany (Jan 2020)
- Keynote Speaker and Organiser for Astronomy on Tap Bonn, Bonn, Germany (April 2019)
- Outreach Presenter and Organiser at Rural Community Astronomy Event, Tom Price, WA, Australia (Aug 2015)
- Keynote Speaker at Residence of Western Australian US Consul General Cynthia Griffen, Perth, WA, Australia (Aug 2014)
- Outreach Presenter in astronomy for ICRAR, Various Locations, WA, Australia (2013 to 2016)
- Outreach Presenter at National Science Week events for UNSW, Various Locations, NSW, Australia (2011 to 2012)
- Lecturer for public classes in Special and General Relativity (UNSW, 2011 to 2012)
- Demonstrator for UNSW Outreach, specialising in Telescopes and Planetarium activities, Various Locations, NSW, Australia (2010 to 2012)

Grader 2005 to Present

- Assessment marking for bayesian statistics problem classes (UWA, 2014 to 2015)
- Exam marking for first year astronomy (UNSW, 2011 to 2012)
- Assessment and Exam marking for general education astronomy (UNSW, 2011 to 2012)

AWARDS

Faculty of Physics, Ruhr-University Bochum

• Lecturer of the Semester (Summer Semester, 2021)

ICRAR, University of Western Australia

• Best Student Talk (ICRARcon, 2013)

Matrix Education

• Physics Teacher of the Year (2012)

University of NSW

• B.L. Turtle Memorial Prize for Astrophysics (2010)

Additional

2014 to Present

Training

- Mental Health First Aid Certification (MHFAA; Standard)
- ALLY: Recipient of ALLY (Australia & New Zealand) training in diversity, equity, and inclusion, specifically regarding working with the LGTBI community
- HLTAID001: Provide Cardiopulmonary Resuscitation
- HLTAID002: Provide Basic Emergency Life Support
- HLTAID003: Provide First Aid

OBSERVING/ PROJECT EXPERIENCE AAT (GAMA) / 2dF (optical)

2013 to Present

• 5 Nights at AAT (1 run, 2014)

Parkes / (21cm)

2013 to Present

- 5 nights performing deep observations of the HI content of the Sculptor Group of galaxies (P837; 1 run, July 2013)
- 13 nights performing observations of the HI content of the GAMA G23, G15, and G12 Fields (P669; 3 runs, 2013 to 2014)

TECHNICAL
SKILLS:
COMPUTING

Extensive experience with using astronomical software, including but not limited to (alphabetical): Aladdin, BPZ, CIGALE, GAIA, GALFIT, LePhare, MagPhys, Scamp, Source Extractor, SWarp, STILTS, and TOPCAT.

Intimate knowledge of Linux, Macintosh, and Microsoft operating systems, and a large variety of cross platform propriety (Office, IDL) and open source (bash, Gnuplot, git, IATEX, R, Python) languages and software. Extensive experience in the writing, distribution, and management of astronomical software.

Comprehensive understanding of, and proficiency in, the use of a variety of programming languages; in particular \mathbf{R} , and to varying extents: bash, Python, Perl, C, Fortran, PHP, and HTML.

Major

CONTRIBUTED R non-CRAN Packages (primary author)

2013 to Present

Software

- \bullet LAMBDAR: Lambda Adaptive Multi-Band Deblending Algorithm for R advanced photometric deblending routines for PSF mismatched data
- SOM DIR: Direct Photometric Redshift Calibration using Self-Organising Maps

R CRAN Packages (co-author, alphabetical order)

2014 to Present

• astro: R functions for Astronomical computing

Presentations Information correct as of April 2021.

Invited Talks

- 1. 'Improved Cosmology with SOM Redshift Calibration', Astrophysics Seminar Series, University of Leiden, Leiden, Netherlands [Virtual] (Jan 2021)
- 2. 'Cosmic Shear in 2020', DIRAC, University of Seattle, Washington, USA [Virtual] (Dec 2020)
- 3. 'Translating Pixels into Cosmology for KiDS-1000', Institut d'Astrophysique de Paris, Paris, France [Virtual] (Nov 2020)
- 4. 'Organised Randoms', Dark Energy Science Collaboration Large-Scale Structure Seminar [Virtual] (Sept 2020)

- 5. 'KiDS-1000 Simulations: Description and Lessons Learnt', Dark Energy Science Collaboration Cosmological Simulations Seminar [Virtual] (Sept 2020)
- 'KiDS-1000 Redshift Distribution Calibration', Princeton Astronomy Seminar, Princeton, NJ, USA [Virtual] (Aug 2020)
- 7. 'Photometric Redshift Calibration with Self Organising Maps', Dark Energy Science Collaboration Redshift Calibration Seminar [Virtual] (Mar 2020)
- 8. 'Photometric Redshift Calibration with Self Organising Maps', DIRAC, University of Seattle, Washington, USA (Mar 2020; cancelled)
- 9. 'Photometric Redshift Calibration with Self Organising Maps', GCCL Seminar [Virtual] (Mar 2020)
- 10. 'Cosmological Weak Lensing in 2019', University of Hamburg, Hamburg, Germany (Dec 2019)
- 11. 'Photometric Redshift Calibration with Self-Organising Maps', LAM, Marseille, France (Sept 2019)
- 12. 'KiDS+VIKING-450: A novel dataset for cosmology and astrophysics', Ruhr-Universität Bochum, Bochum, Germany (May 2019)
- 13. 'KiDS+VIKING Cosmic Shear Cosmology', Univerity of Oxford, Oxford, UK (Nov 2018)
- 14. 'KiDS+VIKING Cosmic Shear Cosmology', Univerity College London, London, UK (Nov 2018)
- 15. 'Exploring the Universe: Observational Methods and Facilities', Universität Bonn, Bonn, Germany (Oct 2018)
- 16. 'KiDS+VIKING: Technical Challenges of Combining Two ESO Public Surveys', ESO, Garching, Germany (Oct 2018)
- 17. 'Observational Methods and Facilities', Universität Bonn, Bonn, Germany (Apr 2018)
- 18. 'Galaxy Stellar Mass Functions', University of Cardiff, Cardiff, Wales (May 2017)

Contributed Talks

- 1. Faint Sample Correlation Functions, KiDS Consortium Meeting, [Virtual] (Nov 2020)
- 2. KiDS Data Release 5, KiDS Consortium Meeting, [Virtual] (April 2020)
- 3. Photometric Redshift Calibration with Self-Organising Maps, Cosmology from Home Conference [Virtual] (Sept 2020)
- 4. Photometric Redshift Calibration with Self-Organising Maps, Euclid OU-PHZ Workshop, INAF Bologna, Bologna, Italy (Nov 2019)
- 5. Updated KiDS Photometric Redshift Calibration, KiDS Consortium Meeting, Bochum, Germany (Sept 2019)
- 6. KiDS Data Release 5, KiDS Consortium Meeting, Bochum, Germany (Sept 2019)
- 7. SOM Direct Redshift Calibration, KiDS Consortium Meeting, Leiden, Netherlands (Apr 2019)
- 8. CSSOS-Euclid Photo-z Simulations, ISSI-Bern Workshop on CSS-Euclid, Bern, Switzerland (Dec 2018)

- 9. Improved Random Catalogue Construction for Photomoetric Clustering, KiDS Consortium Meeting, ESO, Garching, Germany (Oct 2018)
- 10. KiDS Data Release 5, KiDS Consortium Meeting, Bochum, Germany (Oct 2018)
- 11. Towards a Baryonic Mass Function using the GAMA z<0.06 sample, KiDS-GAMA-VIKING Workshop, Royal Observatory of Edinburgh, UK (May 2016)
- 12. FIR Survey Synergies with GAMA, The Cosmic FIR Landscape, University of Lisbon, Portugal (May 2016)
- 13. Multiwavelength Photometry, SEDs, and the properties of galaxies, Seminar, University of St. Andrews, UK (Sept 2015)
- 14. MagPhys Analysis of 220,000 galaxies in GAMA, Modeling Galaxies Across Cosmic Times, Kavli Institute for Cosmology, Cambridge, UK (Sept 2015)
- 15. Multiwavelength Photometry, SEDs, and the properties of galaxies, GAMA Meeting, Heidelberg, Germany (Sept 2015)
- 16. Multiwavelength SEDs in GAMA, Multiwavelength Dissection of Galaxies, Sydney, Australia (May 2015)
- 17. Refinement of Multiwavelength Photometry across all wavelengths, GAMA Photometry Workshop, Perth, Australia (Feb 2015)
- 18. Multiwavelength Photometry and the LAMBDAR code, GAMA Meeting, Cape Town, South Africa (Sept 2014)
- 19. Multiwavelength Photometry and the LAMBDAR code, GAMA Meeting, Sydney, Australia (March 2014)
- ALFALFA HI data and combination with GAMA, Seminar, ICRAR/UWA, Perth, Australia (Dec 2013)
- 21. GAMA and Multiwavelength Analysis of Galaxies, Seminar, Cornell University, Ithaca USA (Oct 2013)
- 22. Image analysis and quality testing in GAMA, GAMA Busy-Week, Perth, Australia (June 2013)

Publications Information correct as of April 2021.

Online bibliographies:

• ADS Library (Used for citation statistics below)

Summary Statistics:

- Total publication = 78 [6 as lead author]
- Total citations = 2,430 [287]
- h-index = 28 [6]
- m-index (h-index / years since PhD = 28/3.42) = 8.19 [1.75]
- i10-index (Publications with more than 10 citations) = 48 [6]

Ten Primary Journal Publications (ordered by date)

- Heymans, C., Tröster, T., Asgari, M., Blake, C., Hildebrandt, H., Joachimi, B., Kuijken, K., and 27 colleagues (2021), "KiDS-1000 Cosmology: Multi-probe weak gravitational lensing and spectroscopic galaxy clustering constraints", Astronomy and Astrophysics, 646, A140 (C=81)
- 2. Wright, A.H., Hildebrandt, H., van den Busch, J.L., Heymans, C., Joachimi, B., Kannawadi, A., and Kuijken, K. (2020), "KiDS+VIKING-450: Improved cosmological parameter constraints from redshift calibration with self-organising maps", Astronomy and Astrophysics, 640, L14 (C=20)
- 3. Wright, A.H., Hildebrandt, H., van den Busch, J.L., and Heymans, C. (2020), "Photometric redshift calibration with self-organising maps", Astronomy and Astrophysics, 637, A100 (C=30)
- 4. Hildebrandt, H., Köhlinger, F., van den Busch, J.L., Joachimi, B., Heymans, C., Kannawadi, A., **Wright, A.H.**, and 21 colleagues (2020), "KiDS+VIKING-450: Cosmic shear tomography with optical and infrared data", Astronomy and Astrophysics, 633, A69 (C=166)
- 5. Wright, A.H., Hildebrandt, H., Kuijken, K., Erben, T., Blake, R., Buddelmeijer, H., Choi, A., and 18 colleagues (2019), "KiDS+VIKING-450: A new combined optical and near-infrared dataset for cosmology and astrophysics", Astronomy and Astrophysics, 632, A34 (C=53)
- 6. Wright, A.H., Driver, S.P., and Robotham, A.S.G. (2018), "GAMA/G10-COSMOS/3D-HST: Evolution of the galaxy stellar mass function over 12.5 Gyr", Monthly Notices of the Royal Astronomical Society, 480, 3491 (C=27)
- 7. Wright, A.H., Robotham, A.S.G., Driver, S.P., Alpaslan, M., Andrews, S.K., Baldry, I.K., Bland-Hawthorn, J., and 20 colleagues (2017), "Galaxy And Mass Assembly (GAMA): the galaxy stellar mass function to z = 0.1 from the r-band selected equatorial regions", Monthly Notices of the Royal Astronomical Society, 470, 283 (C=62)
- 8. Driver, S.P., **Wright, A.H.**, Andrews, S.K., Davies, L.J., Kafle, P.R., Lange, R., Moffett, A.J., and 59 colleagues (2016), "Galaxy And Mass Assembly (GAMA): Panchromatic Data Release (far-UV-far-IR) and the low-z energy budget", Monthly Notices of the Royal Astronomical Society, 455, 3911 (C=100)
- 9. Wright, A.H., Robotham, A.S.G., Bourne, N., Driver, S.P., Dunne, L., Maddox, S.J., Alpaslan, M., and 24 colleagues (2016), "Galaxy And Mass Assembly: accurate panchromatic photometry from optical priors using LAMBDAR", Monthly Notices of the Royal Astronomical Society, 460, 765 (C=95)
- Liske, J., Baldry, I.K., Driver, S.P., Tuffs, R.J., Alpaslan, M., Andrae, E., Brough, S., and 63 colleagues (2015), "Galaxy And Mass Assembly (GAMA): end of survey report and data release 2", Monthly Notices of the Royal Astronomical Society, 452, 2087 (C=322)

Journal Publications

Key: C = Citations (from NASA Astrophysics Data System)

1. Euclid Collaboration, Ilbert, O., de la Torre, S., Martinet, N., Wright, A.H., Paltani, S., Laigle, C., Davidzon, and 158 colleagues (2021), "Euclid preparation: XI. Mean redshift determination from galaxy redshift probabilities for cosmic shear tomography", arXiv e-prints, arXiv:2101.02228 (C=0)

- Taylor, E.N., Cluver, M.E., Duffy, A., Gurri, P., Hoekstra, H., Sonnenfeld, A., Bremer, M.N., and 12 colleagues (2020), "GAMA + KiDS: empirical correlations between halo mass and other galaxy properties near the knee of the stellar-to-halo mass relation", Monthly Notices of the Royal Astronomical Society, 499, 2896 (C=6)
- 3. Johnston, H., Wright, A.H., Joachimi, B., Bilicki, M., Chisari, N.E., Dvornik, A., Erben, T., and 6 colleagues (2020), "Organised Randoms: learning and correcting for systematic galaxy clustering patterns in KiDS using self-organising maps", arXiv e-prints, arXiv:2012.08467 (C=2)
- 4. Stölzner, B., Joachimi, B., Korn, A., Hildebrandt, H., and Wright, A.H. (2020), "Self-calibration and robust propagation of photometric redshift distribution uncertainties in weak gravitational lensing", arXiv e-prints, arXiv:2012.07707 (C=2)
- 5. Napolitano, N.R., Li, R., Spiniello, C., Tortora, C., Sergeyev, A., D'Ago, G., Guo, X., and 14 colleagues (2020), "Discovery of Two Einstein Crosses from Massive Post-blue Nugget Galaxies at z ¿ 1 in KiDS", The Astrophysical Journal, 904, L31 (C=0)
- Bell, C.P.M., Cioni, M.-R.L., Wright, A.H., Rubele, S., Nidever, D.L., Tatton, B.L., van Loon, J.T., and 19 colleagues (2020), "The intrinsic reddening of the Magellanic Clouds as traced by background galaxies II. The Small Magellanic Cloud", Monthly Notices of the Royal Astronomical Society, 499, 993 (C=2)
- 7. Vázquez-Mata, J.A., Loveday, J., Riggs, S.D., Baldry, I.K., Davies, L.J.M., Robotham, A.S.G., Holwerda, B.W., and 10 colleagues (2020), "Galaxy and mass assembly: luminosity and stellar mass functions in GAMA groups", Monthly Notices of the Royal Astronomical Society, 499, 631 (C=1)
- 8. Thorne, J.E., Robotham, A.S.G., Davies, L.J.M., Bellstedt, S., Driver, S.P., Bravo, M., Bremer, M.N., and 7 colleagues (2020), "Deep Extragalactic VIsible Legacy Survey (DEVILS): SED Fitting in the D10-COSMOS Field and the Evolution of the Stellar Mass Function and SFR- M_{\star} relation", arXiv e-prints, arXiv:2011.13605 (C=1)
- 9. Robertson, N.C., Alonso, D., Harnois-Déraps, J., Darwish, O., Kannawad, A., Amon, A., Asgari, M., and 44 colleagues (2020), "Strong detection of the CMB lensingxgalaxy weak lensingcross-correlation from ACT-DR4, Planck Legacy and KiDS-1000", arXiv e-prints, arXiv:2011.11613 (C=0)
- 10. Tröster, T., Asgari, M., Blake, C., Cataneo, M., Heymans, C., Hildebrandt, H., Joachimi, B., and 23 colleagues (2020), "KiDS-1000 Cosmology: constraints beyond flat Λ CDM", arXiv e-prints, arXiv:2010.16416 (C=7)
- 11. Schrabback, T., Hoekstra, H., Van Waerbeke, L., van Uitert, E., Georgiou, C., Asgari, M., Côté, P., and 15 colleagues (2020), "Tightening weak lensing constraints on the ellipticity of galaxy-scale dark matter haloes", arXiv e-prints, arXiv:2010.00311 (C=0)
- 12. van den Busch, J.L., Hildebrandt, H., Wright, A.H., Morrison, C.B., Blake, C., Joachimi, B., Erben, T., and 3 colleagues (2020), "Testing KiDS cross-correlation redshifts with simulations", Astronomy and Astrophysics, 642, A200 (C=14)
- 13. Blake, C., Amon, A., Asgari, M., Bilicki, M., Dvornik, A., Erben, T., Giblin, B., and 14 colleagues (2020), "Testing gravity using galaxy-galaxy lensing and clustering amplitudes in KiDS-1000, BOSS, and 2dFLenS", Astronomy and Astrophysics, 642, A158 (C=10)
- 14. Dvornik, A., Hoekstra, H., Kuijken, K., Wright, A.H., Asgari, M., Bilicki, M., Erben, T., and 9 colleagues (2020), "KiDS+GAMA: The weak lensing calibrated stellar-to-halo mass relation of central and satellite galaxies", Astronomy and Astrophysics, 642, A83 (C=3)

- 15. Bellstedt, S., Driver, S.P., Robotham, A.S.G., Davies, L.J.M., Bogue, C.R.J., Cook, R.H.W., Hashemizadeh, A., and 5 colleagues (2020), "Galaxy And Mass Assembly (GAMA): assimilation of KiDS into the GAMA database", Monthly Notices of the Royal Astronomical Society, 496, 3235 (C=6)
- 16. Vakili, M., Hoekstra, H., Bilicki, M., Fortuna, M.-C., Kuijken, K., Wright, A.H., Asgari, M., and 9 colleagues (2020), "Clustering of red-sequence galaxies in the fourth data release of the Kilo-Degree Survey", arXiv e-prints, arXiv:2008.13154 (C=5)
- 17. Schulze, S., Yaron, O., Sollerman, J., Leloudas, G., Gal, A., Wright, A.H., Lunnan, R., and 47 colleagues (2020), "The Palomar Transient Factory Core-Collapse Supernova Host-Galaxy Sample. I. Host-Galaxy Distribution Functions and Environment-Dependence of CCSNe", arXiv e-prints, arXiv:2008.05988 (C=7)
- 18. Wright, A.H., Hildebrandt, H., van den Busch, J.L., Heymans, C., Joachimi, B., Kannawadi, A., and Kuijken, K. (2020), "KiDS+VIKING-450: Improved cosmological parameter constraints from redshift calibration with self-organising maps", Astronomy and Astrophysics, 640, L14 (C=21)
- 19. Linke, L., Simon, P., Schneider, P., Erben, T., Farrow, D.J., Heymans, C., Hildebrandt, H., and 5 colleagues (2020), "KiDS+VIKING+GAMA: Testing semi-analytic models of galaxy evolution with galaxy-galaxy-galaxy lensing", Astronomy and Astrophysics, 640, A59 (C=2)
- 20. Hildebrandt, H., van den Busch, J.L., Wright, A.H., Blake, C., Joachimi, B., Kuijken, K., Tröster, T., and 11 colleagues (2020), "KiDS-1000 catalogue: Redshift distributions and their calibration", arXiv e-prints, arXiv:2007.15635 (C=19)
- 21. Asgari, M., Lin, C.-A., Joachimi, B., Giblin, B., Heymans, C., Hildebrandt, H., Kannawadi, A., and 18 colleagues (2020), "KiDS-1000 Cosmology: Cosmic shear constraints and comparison between two point statistics", arXiv e-prints, arXiv:2007.15633 (C=54)
- 22. Heymans, C., Tröster, T., Asgari, M., Blake, C., Hildebrandt, H., Joachimi, B., Kuijken, K., and 27 colleagues (2020), "KiDS-1000 Cosmology: Multi-probe weak gravitational lensing and spectroscopic galaxy clustering constraints", arXiv e-prints, arXiv:2007.15632 (C=55)
- 23. Giblin, B., Heymans, C., Asgari, M., Hildebrandt, H., Hoekstra, H., Joachimi, B., Kannawadi, A., and 15 colleagues (2020), "KiDS-1000 catalogue: Weak gravitational lensing shear measurements", arXiv e-prints, arXiv:2007.01845 (C=13)
- Joachimi, B., Lin, C.-A., Asgari, M., Tröster, T., Heymans, C., Hildebrandt, H., Köhlinger, F., and 20 colleagues (2020), "KiDS-1000 Methodology: Modelling and inference for joint weak gravitational lensing and spectroscopic galaxy clustering analysis", arXiv e-prints, arXiv:2007.01844 (C=22)
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