

Publication statistics

As of December 14, 2020, I have 20 peer-reviewed papers and 13 pre-prints on arXiv (astro-ph), with a total of more than 682 citations, and h-index=13 (taken from NASA-ADS). Two of my papers have more than 100 citations each. The most up-to-date list of my publications can be found from ADS here:

http://adsabs.harvard.edu/cgi-bin/basic_connect?qsearch=Kannawad*+&version=1

or from my Google scholar profile: <https://scholar.google.nl/citations?user=QoX9bu8AAAAJ&hl=en>

Pre-prints currently on arXiv

- [Rob+20] N. C. Robertson, D. Alonso, J. Harnois-Déraps, O. Darwish, **A. Kannawadi**, A. Amon, M. Asgari, M. Bilicki, E. Calabrese, S. K. Choi, M. J. Devlin, J. Dunkley, A. Dvornik, T. Erben, S. Ferraro, M. C. Fortuna, B. Giblin, D. Han, C. Heymans, H. Hildebrandt, J. C. Hill, M. Hilton, S. P. Ho, et al. “Strong detection of the CMB lensing \times galaxy weak lensing cross-correlation from ACT-DR4, PlanckLegacy and KiDS-1000”. In: *arXiv e-prints*, arXiv:2011.11613 (Nov. 2020), arXiv:2011.11613. arXiv: 2011.11613 [astro-ph.CO].
- [Trö+20a] T. Tröster, M. Asgari, C. Blake, M. Cataneo, C. Heymans, H. Hildebrandt, B. Joachimi, C. -A. Lin, A. G. Sánchez, A. H. Wright, M. Bilicki, B. Bose, M. Crocce, A. Dvornik, T. Erben, B. Giblin, K. Glazebrook, H. Hoekstra, S. Joudaki, **A. Kannawadi**, F. Köhlinger, K. Kuijken, C. Lidman, et al. “KiDS-1000 Cosmology: constraints beyond flat Λ CDM”. In: *arXiv e-prints*, arXiv:2010.16416 (Oct. 2020), arXiv:2010.16416. arXiv: 2010.16416 [astro-ph.CO].
- [Nak+20] S. J. Nakoneczny, M. Bilicki, A. Pollo, M. Asgari, A. Dvornik, T. Erben, B. Giblin, C. Heymans, H. Hildebrandt, **A. Kannawadi**, K. Kuijken, N. R. Napolitano, and E. Valentijn. “Photometric selection and redshifts for quasars in the Kilo-Degree Survey Data Release 4”. In: *arXiv e-prints*, arXiv:2010.13857 (Oct. 2020), arXiv:2010.13857. arXiv: 2010.13857 [astro-ph.CO].
- [HKK20] H. Hoekstra, **A. Kannawadi**, and T. D. Kitching. “Accounting for object detection bias in weak gravitational lensing studies”. In: *arXiv e-prints*, arXiv:2010.04178 (Oct. 2020), arXiv:2010.04178. arXiv: 2010.04178 [astro-ph.CO].
- [KRH20] **A. Kannawadi**, E. Rosenberg, and H. Hoekstra. “Mitigating the effects of undersampling in weak lensing shear estimation with metacalibration”. In: *arXiv e-prints*, arXiv:2010.04164 (Oct. 2020), arXiv:2010.04164. arXiv: 2010.04164 [astro-ph.IM].
- [Sch+20] T. Schrabback, H. Hoekstra, L. Van Waerbeke, E. van Uitert, C. Georgiou, M. Asgari, P. Côté, J. C. Cuillandre, T. Erben, L. Ferrarese, S. D. J. Gwyn, C. Heymans, H. Hildebrandt, **A. Kannawadi**, K. Kuijken, A. Leauthaud, M. Makler, S. Mei, L. Miller, A. Raichoor, P. Schneider, and A. H. Wright. “Tightening weak lensing constraints on the ellipticity of galaxy-scale dark matter haloes”. In: *arXiv e-prints*, arXiv:2010.00311 (Oct. 2020), arXiv:2010.00311. arXiv: 2010.00311 [astro-ph.CO].
- [Li+20] S. S. Li, K. Kuijken, H. Hoekstra, H. Hildebrandt, B. Joachimi, and **A. Kannawadi**. “KiDS+VIKING-450: Consistency tests for cosmic shear tomography with a colour-based split of source galaxies”. In: *arXiv e-prints*, arXiv:2009.00367 (Sept. 2020), arXiv:2009.00367. arXiv: 2009.00367 [astro-ph.CO].
- [Vak+20] M. Vakili, H. Hoekstra, M. Bilicki, M. C. Fortuna, K. Kuijken, A. H. Wright, M. Asgari, M. Brown, E. Dombrovskij, T. Erben, B. Giblin, C. Heymans, H. Hildebrandt, H. Johnston, S. Joudaki, and **A. Kannawadi**. “Clustering of red-sequence galaxies in the fourth data release of the Kilo-Degree Survey”. In: *arXiv e-prints*, arXiv:2008.13154 (Aug. 2020), arXiv:2008.13154. arXiv: 2008.13154 [astro-ph.CO].
- [Hil+20a] H. Hildebrandt, J. L. van den Busch, A. H. Wright, C. Blake, B. Joachimi, K. Kuijken, T. Tröster, M. Asgari, M. Bilicki, J. T. A. de Jong, A. Dvornik, T. Erben, F. Getman, B. Giblin, C. Heymans, **A. Kannawadi**, C. -A. Lin, and H. -Y. Shan. “KiDS-1000 catalogue: Redshift distributions and their calibration”. In: *arXiv e-prints*, arXiv:2007.15635 (July 2020), arXiv:2007.15635. arXiv: 2007.15635 [astro-ph.CO].
- [Asg+20a] M. Asgari, C. -A. Lin, B. Joachimi, B. Giblin, C. Heymans, H. Hildebrandt, **A. Kannawadi**, B. Stözlner, T. Tröster, J. L. van den Busch, A. H. Wright, M. Bilicki, C. Blake, J. de Jong, A. Dvornik, T. Erben, F. Getman, H. Hoekstra, F. Köhlinger, K. Kuijken, L. Miller, M. Radovich, P. Schneider, and H. -Y. Shan. “KiDS-1000 Cosmology: Cosmic shear constraints and comparison between two point statistics”. In: *arXiv e-prints*, arXiv:2007.15633 (July 2020), arXiv:2007.15633. arXiv: 2007.15633 [astro-ph.CO].
- [Hey+20] C. Heymans, T. Tröster, M. Asgari, C. Blake, H. Hildebrandt, B. Joachimi, K. Kuijken, C. -A. Lin, A. Sánchez, J. L. van den Busch, A. H. Wright, A. Amon, M. Bilicki, J. de Jong, M. Crocce, A. Dvornik, T. Erben, F. Getman, B. Giblin, K. Glazebrook, H. Hoekstra, S. Joudaki, **A. Kannawadi**, et al. “KiDS-1000 Cosmology: Multi-probe weak gravitational lensing and spectroscopic galaxy clustering constraints”. In: *arXiv e-prints* (July 2020), arXiv:2007.15632. arXiv: 2007.15632 [astro-ph.CO].

- [Gib+20] B. Giblin, C. Heymans, M. Asgari, H. Hildebrandt, H. Hoekstra, B. Joachimi, **A. Kannawadi**, K. Kuijken, C. -A. Lin, L. Miller, Tilman Tröster, J. L. van den Busch, A. H. Wright, M. Bilicki, C. Blake, J. de Jong, A. Dvornik, T. Erben, F. Getman, N. R. Napolitano, P. Schneider, and H. -Y. Shan. “KiDS-1000 catalogue: weak gravitational lensing shear measurements”. In: *arXiv e-prints*, arXiv:2007.01845 (July 2020), arXiv:2007.01845. arXiv: 2007.01845 [astro-ph.CO].
- [Joa+20] B. Joachimi, C. -A. Lin, M. Asgari, T. Tröster, C. Heymans, H. Hildebrandt, F. Köhlinger, A. G. Sánchez, A. H. Wright, M. Bilicki, C. Blake, J. L. van den Busch, M. Crocce, A. Dvornik, T. Erben, F. Getman, B. Giblin, H. Hoekstra, **A. Kannawadi**, K. Kuijken, N. R. Napolitano, P. Schneider, R. Scoccimarro, et al. “KiDS-1000 Methodology: Modelling and inference for joint weak gravitational lensing and spectroscopic galaxy clustering analysis”. In: *arXiv e-prints*, arXiv:2007.01844 (July 2020), arXiv:2007.01844. arXiv: 2007.01844 [astro-ph.CO].

Complete list of peer-reviewed papers

- [Bla+20] C. Blake, A. Amon, M. Asgari, M. Bilicki, A. Dvornik, T. Erben, B. Giblin, K. Glazebrook, C. Heymans, H. Hildebrandt, B. Joachimi, S. Joudaki, **A. Kannawadi**, K. Kuijken, C. Lidman, D. Parkinson, H. -Y. Shan, T. Tröster, J. L. van den Busch, C. Wolf, and A. H. Wright. “Testing gravity using galaxy-galaxy lensing and clustering amplitudes in KiDS-1000, BOSS, and 2dFLenS”. In: A&A 642, A158 (Oct. 2020), A158. DOI: 10.1051/0004-6361/202038505. arXiv: 2005.14351 [astro-ph.CO].
- [Wri+20] A. H. Wright, H. Hildebrandt, J. L. van den Busch, C. Heymans, B. Joachimi, **A. Kannawadi**, and K. Kuijken. “KiDS+VIKING-450: Improved cosmological parameter constraints from redshift calibration with self-organising maps”. In: A&A 640, L14 (Aug. 2020), p. L14. DOI: 10.1051/0004-6361/202038389. arXiv: 2005.04207 [astro-ph.CO].
- [Dvo+20] A. Dvornik, H. Hoekstra, K. Kuijken, A. H. Wright, M. Asgari, M. Bilicki, T. Erben, B. Giblin, A. W. Graham, C. Heymans, H. Hildebrandt, A. M. Hopkins, **A. Kannawadi**, C. -A. Lin, E. N. Taylor, and T. Tröster. “KiDS+GAMA: The weak lensing calibrated stellar-to-halo mass relation of central and satellite galaxies”. In: A&A 642, A83 (Oct. 2020), A83. DOI: 10.1051/0004-6361/202038693. arXiv: 2006.10777 [astro-ph.CO].
- [Lin+20] L. Linke, P. Simon, P. Schneider, T. Erben, D. J. Farrow, C. Heymans, H. Hildebrandt, A. M. Hopkins, **A. Kannawadi**, N. R. Napolitano, C. Sifón, and A. H. Wright. “KiDS+VIKING+GAMA: Testing semi-analytic models of galaxy evolution with galaxy-galaxy-galaxy lensing”. In: A&A 640, A59 (Aug. 2020), A59. DOI: 10.1051/0004-6361/202038355. arXiv: 2005.02419 [astro-ph.CO].
- [Jou+20] S. Joudaki, H. Hildebrandt, D. Traykova, N. E. Chisari, C. Heymans, **A. Kannawadi**, K. Kuijken, A. H. Wright, M. Asgari, T. Erben, H. Hoekstra, B. Joachimi, L. Miller, T. Tröster, and J. L. van den Busch. “KiDS+VIKING-450 and DES-Y1 combined: Cosmology with cosmic shear”. In: A&A 638, L1 (June 2020), p. L1. DOI: 10.1051/0004-6361/201936154. arXiv: 1906.09262 [astro-ph.CO].
- [Euc+20] Euclid Collaboration, P. Paykari, T. Kitching, H. Hoekstra, R. Azzollini, V. F. Cardone, M. Cropper, C. A. J. Duncan, **A. Kannawadi**, L. Miller, H. Aussel, I. F. Conti, N. Auricchio, M. Baldi, S. Bardelli, A. Biviano, D. Bonino, E. Borsato, E. Bozzo, E. Branchini, S. Brau-Nogue, M. Brescia, J. Brinchmann, et al. “Euclid preparation. VI. Verifying the performance of cosmic shear experiments”. In: A&A 635, A139 (Mar. 2020), A139. DOI: 10.1051/0004-6361/201936980. arXiv: 1910.10521 [astro-ph.CO].
- [Asg+20b] M. Asgari, T. Tröster, C. Heymans, H. Hildebrandt, J. L. van den Busch, A. H. Wright, A. Choi, T. Erben, B. Joachimi, S. Joudaki, **A. Kannawadi**, K. Kuijken, C. -A. Lin, P. Schneider, and J. Zuntz. “KiDS+VIKING-450 and DES-Y1 combined: Mitigating baryon feedback uncertainty with COSEBIs”. In: A&A 634, A127 (Feb. 2020), A127. DOI: 10.1051/0004-6361/201936512. arXiv: 1910.05336 [astro-ph.CO].
- [Trö+20b] T. Tröster, Ariel. G. Sánchez, M. Asgari, C. Blake, M. Crocce, C. Heymans, H. Hildebrandt, B. Joachimi, S. Joudaki, **A. Kannawadi**, C. -A. Lin, and A. Wright. “Cosmology from large-scale structure. Constraining Λ CDM with BOSS”. In: A&A 633, L10 (Jan. 2020), p. L10. DOI: 10.1051/0004-6361/201936772. arXiv: 1909.11006 [astro-ph.CO].
- [Xia+20] Q. Xia, N. C. Robertson, C. Heymans, A. Amon, M. Asgari, Y.-C. Cai, T. Erben, J. Harnois-Déraps, H. Hildebrandt, **A. Kannawadi**, K. Kuijken, P. Schneider, C. Sifón, T. Tröster, and A. H. Wright. “A gravitational lensing detection of filamentary structures connecting luminous red galaxies”. In: A&A 633, A89 (Jan. 2020), A89. DOI: 10.1051/0004-6361/201936678. arXiv: 1909.05852 [astro-ph.CO].
- [Hil+20b] H. Hildebrandt, F. Köhlinger, J. L. van den Busch, B. Joachimi, C. Heymans, **A. Kannawadi**, A. H. Wright, M. Asgari, C. Blake, H. Hoekstra, S. Joudaki, K. Kuijken, L. Miller, C. B. Morrison, T. Tröster, A. Amon, M. Archidiacono, S. Brieden, A. Choi, J. T. A. de Jong, T. Erben, B. Giblin, A. Mead, et al. “KiDS+VIKING-450: Cosmic shear tomography with optical and infrared data”. In: A&A 633, A69 (Jan. 2020), A69. DOI: 10.1051/0004-6361/201834878. arXiv: 1812.06076 [astro-ph.CO].

- [Vak+19] M. Vakili, M. Bilicki, H. Hoekstra, N. E. Chisari, M. J. I. Brown, C. Georgiou, A. **Kannawadi**, K. Kuijken, and A. H. Wright. “Luminous red galaxies in the Kilo-Degree Survey: selection with broad-band photometry and weak lensing measurements”. In: MNRAS 487.3 (Aug. 2019), pp. 3715–3733. DOI: 10.1093/mnras/stz1249. arXiv: 1811.02518 [astro-ph.CO].
- [A K+19] **A. Kannawadi**, H. Hoekstra, L. Miller, M. Viola, I. Fenech Conti, R. Herbonnet, T. Erben, C. Heymans, H. Hildebrandt, K. Kuijken, M. Vakili, and A. H. Wright. “Towards emulating cosmic shear data: revisiting the calibration of the shear measurements for the Kilo-Degree Survey”. In: A&A 624, A92 (Apr. 2019), A92. DOI: 10.1051/0004-6361/201834819. arXiv: 1812.03983 [astro-ph.CO].
- [Geo+19] C. Georgiou, H. Johnston, H. Hoekstra, M. Viola, K. Kuijken, B. Joachimi, N. E. Chisari, D. J. Farrow, H. Hildebrandt, B. W. Holwerda, and **A. Kannawadi**. “The dependence of intrinsic alignment of galaxies on wavelength using KiDS and GAMA”. In: A&A 622, A90 (Feb. 2019), A90. DOI: 10.1051/0004-6361/201834219. arXiv: 1809.03602 [astro-ph.CO].
- [Har+18] J. Harnois-Déraps, A. Amon, A. Choi, V. Demchenko, C. Heymans, **A. Kannawadi**, R. Nakajima, E. Sirks, L. van Waerbeke, Yan-Chuan Cai, B. Giblin, H. Hildebrandt, H. Hoekstra, L. Miller, and T. Tröster. “Cosmological simulations for combined-probe analyses: covariance and neighbour-exclusion bias”. In: MNRAS 481.1 (Nov. 2018), pp. 1337–1367. DOI: 10.1093/mnras/sty2319. arXiv: 1805.04511 [astro-ph.CO].
- [Amo+18] A. Amon, C. Heymans, D. Klaes, T. Erben, C. Blake, H. Hildebrandt, H. Hoekstra, K. Kuijken, L. Miller, C. B. Morrison, A. Choi, J. T. A. de Jong, K. Glazebrook, N. Irisarri, B. Joachimi, S. Joudaki, **A. Kannawadi**, C. Lidman, N. Napolitano, D. Parkinson, P. Schneider, E. van Uitert, M. Viola, and C. Wolf. “KiDS-i-800: comparing weak gravitational lensing measurements from same-sky surveys”. In: MNRAS 477 (July 2018), pp. 4285–4307. DOI: 10.1093/mnras/sty859. arXiv: 1707.04105.
- [Pla+16] A. A. Plazas, C. Shapiro, **A. Kannawadi**, R. Mandelbaum, J. Rhodes, and R. Smith. “The Effect of Detector Nonlinearity on WFIRST PSF Profiles for Weak Gravitational Lensing Measurements”. In: PASP 128.10 (Oct. 2016), p. 104001. DOI: 10.1088/1538-3873/128/968/104001. arXiv: 1605.01001 [astro-ph.IM].
- [Kan+16] **A. Kannawadi**, C. A. Shapiro, R. Mandelbaum, C. M. Hirata, J. W. Kruk, and J. D. Rhodes. “The Impact of Interpixel Capacitance in CMOS Detectors on PSF Shapes and Implications for WFIRST”. In: PASP 128.9 (Sept. 2016), p. 095001. DOI: 10.1088/1538-3873/128/967/095001. arXiv: 1512.01570 [astro-ph.IM].
- [KML15] **A. Kannawadi**, R. Mandelbaum, and C. Lackner. “The impact of cosmic variance on simulating weak lensing surveys”. In: MNRAS 449 (June 2015), pp. 3597–3612. DOI: 10.1093/mnras/stv520. arXiv: 1412.1094.
- [Man+14] R. Mandelbaum, B. Rowe, J. Bosch, C. Chang, F. Courbin, M. Gill, M. Jarvis, **A. Kannawadi**, T. Kacprzak, C. Lackner, A. Leauthaud, H. Miyatake, R. Nakajima, J. Rhodes, M. Simet, J. Zuntz, B. Armstrong, S. Bridle, J. Coupon, J. P. Dietrich, M. Gentile, C. Heymans, A. S. Jurling, et al. “The Third Gravitational Lensing Accuracy Testing (GREAT3) Challenge Handbook”. In: ApJS 212, 5 (May 2014), p. 5. DOI: 10.1088/0067-0049/212/1/5. arXiv: 1308.4982.
- [KSL16] **A. Kannawadi**, A. Sharma, and A. Lakshminarayan. “Persistent entanglement in a class of eigenstates of quantum Heisenberg spin glasses”. In: EPL (Europhysics Letters) 115 (Sept. 2016), p. 57005. DOI: 10.1209/0295-5075/115/57005. arXiv: 1407.5090 [quant-ph].

Papers in preparation

The titles link to the live version of the drafts

A. Kannawadi et al. “*The impact of Interpixel Capacitance in hybrid-CMOS detectors on shear calibration biases for WFIRST*”.

H. Hoekstra, **A. Kannawadi** & L. Miller “*A study of instrumental effects in OmegaCAM data*”.

Last updated on December 14, 2020