Rachel Mandelbaum

In June 2018, my h-index was 53 according to NASA Astrophysics Data System (ADS), with >18,000 citations when including all papers. When excluding large collaboration papers for which I was not part of the lead authorship team, my h-index is 47. Other identifying information:

NASA ADS search results for my publications: `http://tinyurl.com/pdftxjw`

ResearcherID: N-8955-2014

ORCID: 0000-0003-2271-1527

Publications submitted to refereed journals, under review

2018

Costanzi, M., Rozo, E., Rykoff, E. S., Farahi, A., Jeltema, T., Evrard, A. E., Mantz, A., Gruen, D., Mandelbaum, R., DeRose, J., McClintock, T., Varga, T. N., Zhang, Y., Weller, J., Wechsler, R. H., and Aguena, M. (2018). Modeling projection effects in optically-selected cluster catalogues. *arXiv:1807.07072*

Rau, M. M., Koposov, S. E., Trac, H., and Mandelbaum, R. (2018). Calibrating Long Period Variables as Standard Candles with Machine Learning. *arXiv:1806.02841*

Chen, Y.-C., Ho, S., Blazek, J., He, S., Mandelbaum, R., Melchior, P., and Singh, S. (2018). Detecting Galaxy-Filament Alignments in the Sloan Digital Sky Survey III. *arXiv:1805.00159*

Miyatake, H. et al. (2018). Weak-Lensing Mass Calibration of ACTPol Sunyaev-Zel'dovich Clusters with the Hyper Suprime-Cam Survey. *arXiv:1804.05873*

Singh, S., Alam, S., Mandelbaum, R., Seljak, U., Rodriguez-Torres, S., and Ho, S. (2018). Probing gravity with a joint analysis of galaxy and CMB lensing and SDSS spectroscopy. *arXiv:1803.08915*

Alam, S., Zu, Y., Peacock, J. A., and Mandelbaum, R. (2018). Cosmic web dependence of galaxy clustering and quenching in SDSS. *arXiv:1801.04878*

2017

Mandelbaum, R. (2017). Weak lensing for precision cosmology. *arXiv:1710.03235*

Mandelbaum, R., Lanusse, F., Leauthaud, A., Armstrong, R., Simet, M., Miyatake, H., Meyers, J. E., Bosch, J., Miyazaki, S., and Tanaka, M. (2017). Weak lensing shear calibration with simulations of the HSC survey. *arXiv:1710.00885*

Hikage, C., Mandelbaum, R., Leauthaud, A., Rozo, E., and Rykoff, E. S. (2017). Testing redMaPPer Centering Probabilities using Galaxy Clustering and Galaxy-Galaxy Lensing. *arXiv:1702.08614*

Huff, E. and Mandelbaum, R. (2017). Metacalibration: Direct Self-Calibration of Biases in Shear Measurement. *arXiv:1702.02600*

Publications in refereed journals (published or in press)

2018

Huang, S., Leauthaud, A., Greene, J., Bundy, K., Lin, Y.-T., Tanaka, M., Mandelbaum, R., Miyazaki, S., and Komiyama, Y. (2018c). A detection of the environmental dependence of the sizes and stellar haloes of massive central galaxies. *Mon. Not. R. Astr. Soc.*, 480:521–537

Hall, K. R., Crichton, D., Marriage, T., Zakamska, N. L., and Mandelbaum, R. (2018). Downsizing of star formation measured from the clustered infrared background correlated with quasarsy. *Mon. Not. R. Astr. Soc.*, 480:149–181

Leonard, C. D. and Mandelbaum, R. (2018). Measuring the scale dependence of intrinsic alignments usingmultiple shear estimates. *Mon. Not. R. Astr. Soc.*, 479:1412–1426

Zu, Y. and Mandelbaum, R. (2018). Mapping stellar content to dark matter haloes - III. Environmental dependence and conformity of galaxy colours. *Mon. Not. R. Astr. Soc.*, 476:1637–1653

Lanusse, F., Ma, Q., Li, N., Collett, T. E., Li, C.-L., Ravanbakhsh, S., Mandelbaum, R., and Póczos, B. (2018). CMU DeepLens: deep learning for automatic image-based galaxy-galaxy strong lens finding. *Mon. Not. R. Astr. Soc.*, 473:3895–3906

Huang, H.-J., Mandelbaum, R., Freeman, P. E., Chen, Y.-C., Rozo, E., and Rykoff, E. (2018a). Intrinsic alignment in redMaPPer clusters - II. Radial alignment of satellites towards cluster centres. *Mon. Not. R. Astr. Soc.*, 474:4772–4794

Medezinski, E. et al. (2018). Source selection for cluster weak lensing measurements in the Hyper Suprime-Cam survey. *Publications of the Astronomical Society of Japan*, 70:30

Mao, Y.-Y. et al. (2018). DESCQA: An Automated Validation Framework for Synthetic Sky Catalogs. *The Astrophysical Journal Supplement Series*, 234:36

Oguri, M. et al. (2018). Two- and three-dimensional wide-field weak lensing mass maps from the Hyper Suprime-Cam Subaru Strategic Program S16A data. *Publications of the Astronomical Society of Japan*, 70:S26

Bosch, J. et al. (2018). The Hyper Suprime-Cam software pipeline. *Publications of the Astronomical Society of Japan*, 70:S5

Mandelbaum, R. et al. (2018). The first-year shear catalog of the Subaru Hyper Suprime-Cam Subaru Strategic Program Survey. *Publications of the Astronomical Society of Japan*, 70:S25

Miyaoka, K. et al. (2018). Multiwavelength study of X-ray luminous clusters in the Hyper Suprime- Cam Subaru Strategic Program S16A field. *Publications of the Astronomical Society of Japan*, 70:S22

Nishizawa, A. J. et al. (2018). First results on the cluster galaxy population from the Subaru Hyper Suprime-Cam survey. II. Faint end color-magnitude diagrams and radial profiles of red and blue galaxies at $0.1 < z < 1.1$. *Publications of the Astronomical Society of Japan*, 70:S24

Huang, S. et al. (2018b). Characterization and photometric performance of the Hyper Suprime-Cam Software Pipeline. *Publications of the Astronomical Society of Japan*, 70:S6

2017 Rhodes, J. et al. (2017). Scientific Synergy between LSST and Euclid. *Astrophys. J. Supp.*, 233:21

Singh, S., Mandelbaum, R., Seljak, U., Slosar, A., and Vazquez Gonzalez, J. (2017b). Galaxy-galaxy lensing estimators and their covariance properties. *Mon. Not. R. Astr. Soc.*, 471:3827–3844

Zu, Y., Mandelbaum, R., Simet, M., Rozo, E., and Rykoff, E. S. (2017). On the level of cluster assembly bias in SDSS. *Mon. Not. R. Astr. Soc.*, 470:551–560

Leauthaud, A. et al. (2017). Lensing is low: cosmology, galaxy formation or new physics? *Mon. Not. R. Astr. Soc.*, 467:3024–3047

Simet, M., Battaglia, N., Mandelbaum, R., and Seljak, U. (2017a). Weak lensing calibration of mass bias in the REFLEX+BCS X-ray galaxy cluster catalogue. *Mon. Not. R. Astr. Soc.*, 466:3663–3673

Simet, M., McClintock, T., Mandelbaum, R., Rozo, E., Rykoff, E., Sheldon, E., and Wechsler, R. H. (2017b). Weak lensing measurement of the mass-richness relation of SDSS redMaPPer clusters. *Mon. Not. R. Astr. Soc.*, 466:3103–3118

Chen, Y.-C., Ho, S., Mandelbaum, R., Bahcall, N. A., Brownstein, J. R., Freeman, P. E., Genovese, C. R., Schneider, D. P., and Wasserman, L. (2017). Detecting effects of filaments on galaxy properties in the Sloan Digital Sky Survey III. *Mon. Not. R. Astr. Soc.*, 466:1880–1893

Alam, S., Miyatake, H., More, S., Ho, S., and Mandelbaum, R. (2017). Testing gravity on large scales by combining weak lensing with galaxy clustering using CFHTLenS and BOSS CMASS. *Mon. Not. R. Astr. Soc.*, 465:4853–4865

Singh, S., Mandelbaum, R., and Brownstein, J. R. (2017a). Cross-correlating Planck CMB lensing with SDSS: lensing-lensing and galaxy-lensing cross-correlations. *Mon. Not. R. Astr. Soc.*, 464:2120–2138

2016

Huang, H.-J., Mandelbaum, R., Freeman, P. E., Chen, Y.-C., Rozo, E., Rykoff, E., and Baxter, E. J. (2016). Intrinsic alignments in redMaPPer clusters - I. Central galaxy alignments and angular segregation of satellites. *Mon. Not. R. Astr. Soc.*, 463:222–244

Tenneti, A., Mandelbaum, R., and Di Matteo, T. (2016). Intrinsic alignments of disc and elliptical galaxies in the MassiveBlack-II and Illustris simulations. *Mon. Not. R. Astr. Soc.*, 462:2668–2680

Plazas, A. A., Shapiro, C., Kannawadi, A., Mandelbaum, R., Rhodes, J., and Smith, R. (2016). The Effect of Detector Nonlinearity on WFIRST PSF Profiles for Weak Gravitational Lensing Measurements. *Pub. Astron. Soc. Pacific*, 128(10):104001

Kannawadi, A., Shapiro, C. A., Mandelbaum, R., Hirata, C. M., Kruk, J. W., and Rhodes, J. D. (2016). The Impact of Interpixel Capacitance in CMOS Detectors on PSF Shapes and Implications for WFIRST. *Pub. Astron. Soc. Pacific*, 128(9):095001

Ravanbakhsh, S., Lanusse, F., Mandelbaum, R., Schneider, J., and Poczos, B. (2016). Enabling Dark Energy Science with Deep Generative Models of Galaxy Images. *arXiv:1609.05796*

More, S. et al. (2016). Detection of the Splashback Radius and Halo Assembly Bias of Massive Galaxy Clusters. *Astrophys. J.*, 825:39

Zu, Y. and Mandelbaum, R. (2016). Mapping stellar content to dark matter haloes - II. Halo mass is the main driver of galaxy quenching. *Mon. Not. R. Astr. Soc.*, 457:4360–4383

Gurvich, A. and Mandelbaum, R. (2016). The impact of correlated noise on galaxy shape estimation for weak lensing. *Mon. Not. R. Astr. Soc.*, 457:3522–3534

Mandelbaum, R., Wang, W., Zu, Y., White, S., Henriques, B., and More, S. (2016). Strong bimodality in the host halo mass of central galaxies from galaxy-galaxy lensing. *Mon. Not. R. Astr. Soc.*, 457:3200–3218

Singh, S. and Mandelbaum, R. (2016). Intrinsic alignments of BOSS LOWZ galaxies - II. Impact of shape measurement methods. *Mon. Not. R. Astr. Soc.*, 457:2301–2317

Wang, W., White, S. D. M., Mandelbaum, R., Henriques, B., Anderson, M. E., and Han, J. (2016). A weak gravitational lensing recalibration of the scaling relations linking the gas properties of dark haloes to their mass. *Mon. Not. R. Astr. Soc.*, 456:2301–2320

Lin, Y.-T., Mandelbaum, R., Huang, Y.-H., Huang, H.-J., Dalal, N., Diemer, B., Jian, H.-Y., and Kravtsov, A. (2016). On Detecting Halo Assembly Bias with Galaxy Populations. *Astrophys. J.*, 819:119

Miyatake, H., More, S., Takada, M., Spergel, D. N., Mandelbaum, R., Rykoff, E. S., and Rozo, E. (2016). Evidence of Halo Assembly Bias in Massive Clusters. *Physical Review Letters*, 116(4):041301

2015 Chen, Y.-C., Ho, S., Tenneti, A., Mandelbaum, R., Croft, R., DiMatteo, T., Freeman, P. E., Genovese, C. R., and Wasserman, L. (2015). Investigating galaxy-filament alignments in hydrodynamic simulations using density ridges. *Mon. Not. R. Astr. Soc.*, 454:3341–3350

Zu, Y. and Mandelbaum, R. (2015). Mapping stellar content to dark matter haloes using galaxy clustering and galaxy-galaxy lensing in the SDSS DR7. *Mon. Not. R. Astr. Soc.*, 454:1161–1191

Kirk, D. et al. (2015). Galaxy Alignments: Observations and Impact on Cosmology. *Space Sci. Rev.*, 193:139–211

Kiessling, A. et al. (2015). Galaxy Alignments: Theory, Modelling & Simulations. *Space Sci. Rev.*, 193:67–136

Joachimi, B. et al. (2015a). Galaxy Alignments: An Overview. *Space Sci. Rev.*, 193:1–65

Joachimi, B., Singh, S., and Mandelbaum, R. (2015b). Detection of spatial correlations of Fundamental Plane residuals, and cosmological implications. *Mon. Not. R. Astr. Soc.*, 454:478–488

Tenneti, A., Mandelbaum, R., Di Matteo, T., Kiessling, A., and Khandai, N. (2015a). Galaxy shapes and alignments in the MassiveBlack-II hydrodynamic and dark matter-only simulations. *Mon. Not. R. Astr. Soc.*, 453:469–482

Hoshino, H. et al. (2015). Luminous red galaxies in clusters: central occupation, spatial distributions and miscentring. *Mon. Not. R. Astr. Soc.*, 452:998–1013

Mandelbaum, R. et al. (2015). GREAT3 results - I. Systematic errors in shear estimation and the impact of real galaxy morphology. *Mon. Not. R. Astr. Soc.*, 450:2963–3007

Singh, S., Mandelbaum, R., and More, S. (2015). Intrinsic alignments of SDSS-III BOSS LOWZ sample galaxies. *Mon. Not. R. Astr. Soc.*, 450:2195–2216

Kannawadi, A., Mandelbaum, R., and Lackner, C. (2015). The impact of cosmic variance on simulating weak lensing surveys. *Mon. Not. R. Astr. Soc.*, 449:3597–3612

More, S., Miyatake, H., Mandelbaum, R., Takada, M., Spergel, D. N., Brownstein, J. R., and Schneider, D. P. (2015). The Weak Lensing Signal and the Clustering of BOSS Galaxies. II. Astrophysical and Cosmological Constraints. *Astrophys. J.*, 806:2

Miyatake, H. et al. (2015). The Weak Lensing Signal and the Clustering of BOSS Galaxies. I. Measurements. *Astrophys. J.*, 806:1

Simet, M. and Mandelbaum, R. (2015). Background sky obscuration by cluster galaxies as a source of systematic error for weak lensing. *Mon. Not. R. Astr. Soc.*, 449:1259–1269

Mandelbaum, R. (2015b). Instrumental systematics and weak gravitational lensing. *Journal of Instrumentation*, 10:C05017

Tenneti, A., Singh, S., Mandelbaum, R., Matteo, T. D., Feng, Y., and Khandai, N. (2015b). Intrinsic alignments of galaxies in the MassiveBlack-II simulation: analysis of two-point statistics. *Mon. Not. R. Astr. Soc.*, 448:3522–3544

Mandelbaum, R. (2015a). Galaxy Halo Masses from Weak Gravitational Lensing. In Cappellari, M. and Courteau, S., editors, *Galaxy Masses as Constraints of Formation Models*, volume 311 of *IAU Symposium*, pages 86–95

Rowe, B. T. P. et al. (2015). GALSIM: The modular galaxy image simulation toolkit. *Astronomy and Computing*, 10:121–150

Newman, J. A. et al. (2015). Spectroscopic needs for imaging dark energy experiments. *Astroparticle Physics*, 63:81–100

Huterer, D. et al. (2015). Growth of cosmic structure: Probing dark energy beyond expansion. *Astroparticle Physics*, 63:23–41

Han, J. et al. (2015). Galaxy And Mass Assembly (GAMA): the halo mass of galaxy groups from maximum-likelihood weak lensing. *Mon. Not. R. Astr. Soc.*, 446:1356–1379

2014 Chisari, N. E., Mandelbaum, R., Strauss, M. A., Huff, E. M., and Bahcall, N. A. (2014). Intrinsic alignments of group and cluster galaxies in photometric surveys. *Mon. Not. R. Astr. Soc.*, 445:726–748

Tenneti, A., Mandelbaum, R., Di Matteo, T., Feng, Y., and Khandai, N. (2014). Galaxy shapes and intrinsic alignments in the MassiveBlack-II simulation. *Mon. Not. R. Astr. Soc.*, 441:470–485

Huff, E. M., Eifler, T., Hirata, C. M., Mandelbaum, R., Schlegel, D., and Seljak, U. (2014a). Seeing in the dark - II. Cosmic shear in the Sloan Digital Sky Survey. *Mon. Not. R. Astr. Soc.*, 440:1322–1344

Huff, E. M., Hirata, C. M., Mandelbaum, R., Schlegel, D., Seljak, U., and Lupton, R. H. (2014b). Seeing in the dark - I. Multi-epoch alchemy. *Mon. Not. R. Astr. Soc.*, 440:1296–1321

Mandelbaum, R. et al. (2014). The Third Gravitational Lensing Accuracy Testing (GREAT3) Challenge Handbook. *Astrophys. J. Supp.*, 212:5

Miyatake, H., Mandelbaum, R., and Rowe, B. (2014). The GREAT3 challenge. *Journal of Instrumentation*, 9:C04031

Jee, M. J. et al. (2014). Weighing "El Gordo" with a Precision Scale: Hubble Space Telescope Weak-lensing Analysis of the Merging Galaxy Cluster ACT-CL J0102-4915 at z = 0.87. *Astrophys. J.*, 785:20

2013 Hikage, C., Mandelbaum, R., Takada, M., and Spergel, D. N. (2013). Where are the Luminous Red Galaxies (LRGs)? Using correlation measurements and lensing to relate LRGs to dark matter haloes. *Mon. Not. R. Astr. Soc.*, 435:2345–2370

Schneider, M. D. et al. (2013). Galaxy And Mass Assembly (GAMA): galaxy radial alignments in GAMA groups. *Mon. Not. R. Astr. Soc.*, 433:2727–2738

Mandelbaum, R., Slosar, A., Baldauf, T., Seljak, U., Hirata, C. M., Nakajima, R., Reyes, R., and Smith, R. E. (2013). Cosmological parameter constraints from galaxy-galaxy lensing and galaxy clustering with the SDSS DR7. *Mon. Not. R. Astr. Soc.*, 432:1544–1575

Zitrin, A., Menanteau, F., Hughes, J. P., Coe, D., Barrientos, L. F., Infante, L., and Mandelbaum, R. (2013). A Highly Elongated Prominent Lens at z = 0.87: First Strong-lensing Analysis of El Gordo. *Astrophys. J. Lett.*, 770:L15

Miyatake, H. et al. (2013). Subaru weak lensing measurement of a z = 0.81 cluster discovered by the Atacama Cosmology Telescope Survey. *Mon. Not. R. Astr. Soc.*, 429:3627–3644

2012 Reyes, R., Mandelbaum, R., Gunn, J. E., Nakajima, R., Seljak, U., and Hirata, C. M. (2012). Optical-to-virial velocity ratios of local disc galaxies from combined kinematics and galaxy-galaxy lensing. *Mon. Not. R. Astr. Soc.*, 425:2610–2640

Sheldon, E. S., Cunha, C. E., Mandelbaum, R., Brinkmann, J., and Weaver, B. A. (2012). Photometric Redshift Probability Distributions for Galaxies in the SDSS DR8. *Astrophys. J. Supp.*, 201:32

Smargon, A., Mandelbaum, R., Bahcall, N., and Niederste-Ostholt, M. (2012). Detection of intrinsic cluster alignments to 100 h^{-1} Mpc in the Sloan Digital Sky Survey. *Mon. Not. R. Astr. Soc.*, 423:856–861

Lombriser, L., Schmidt, F., Baldauf, T., Mandelbaum, R., Seljak, U., and Smith, R. E. (2012). Cluster density profiles as a test of modified gravity. *Phys. Rev. D*, 85(10):102001

Blazek, J., Mandelbaum, R., Seljak, U., and Nakajima, R. (2012). Separating intrinsic alignment and galaxy-galaxy lensing. *J. Cosmology Astropart. Phys.*, 5:041

Nakajima, R., Mandelbaum, R., Seljak, U., Cohn, J. D., Reyes, R., and Cool, R. (2012). Photometric redshift requirements for lens galaxies in galaxy-galaxy lensing analyses. *Mon. Not. R. Astr. Soc.*, 420:3240–3263

Mandelbaum, R., Hirata, C. M., Leauthaud, A., Massey, R. J., and Rhodes, J. (2012). Precision simulation of ground-based lensing data using observations from space. *Mon. Not. R. Astr. Soc.*, 420:1518–1540

2011 Masters, K. L. et al. (2011). The morphology of galaxies in the Baryon Oscillation Spectroscopic Survey. *Mon. Not. R. Astr. Soc.*, 418:1055–1070

Reyes, R., Mandelbaum, R., Gunn, J. E., Pizagno, J., and Lackner, C. N. (2011). Calibrated Tully-Fisher relations for improved estimates of disc rotation velocities. *Mon. Not. R. Astr. Soc.*, 417:2347–2386

Joachimi, B., Mandelbaum, R., Abdalla, F. B., and Bridle, S. L. (2011). Constraints on intrinsic alignment contamination of weak lensing surveys using the MegaZ-LRG sample. *Astron. & Astrophys.*, 527:A26

Mandelbaum, R. et al. (2011). The WiggleZ Dark Energy Survey: direct constraints on blue galaxy intrinsic alignments at intermediate redshifts. *Mon. Not. R. Astr. Soc.*, 410:844–859

Kitching, T. et al. (2010). Gravitational Lensing Accuracy Testing 2010 (GREAT10) Challenge Handbook. *arXiv:astro-ph/1009.0779*

2010 Schulz, A. E., Mandelbaum, R., and Padmanabhan, N. (2010). Testing adiabatic contraction with Sloan Digital Sky Survey elliptical galaxies. *Mon. Not. R. Astr. Soc.*, 408:1463–1475

Mandelbaum, R., Seljak, U., Baldauf, T., and Smith, R. E. (2010). Precision cluster mass determination from weak lensing. *Mon. Not. R. Astr. Soc.*, 405:2078–2102

Bridle, S. et al. (2010). Results of the GREAT08 Challenge: an image analysis competition for cosmological lensing. *Mon. Not. R. Astr. Soc.*, 405:2044–2061

Baldauf, T., Smith, R. E., Seljak, U., and Mandelbaum, R. (2010). Algorithm for the direct reconstruction of the dark matter correlation function from weak lensing and galaxy clustering. *Phys. Rev. D*, 81(6):063531

Reyes, R., Mandelbaum, R., Seljak, U., Baldauf, T., Gunn, J. E., Lombriser, L., and Smith, R. E. (2010). Confirmation of general relativity on large scales from weak lensing and galaxy velocities. *Nature*, 464:256–258

2009 Sheldon, E. S. et al. (2009). Cross-correlation Weak Lensing of SDSS Galaxy Clusters. I. Measurements. *Astrophys. J.*, 703:2217–2231

Mandelbaum, R., van de Ven, G., and Keeton, C. R. (2009b). Galaxy density profiles and shapes - II. Selection biases in strong lensing surveys. *Mon. Not. R. Astr. Soc.*, 398:635–657

van de Ven, G., Mandelbaum, R., and Keeton, C. R. (2009). Galaxy density profiles and shapes - I. Simulation pipeline for lensing by realistic galaxy models. *Mon. Not. R. Astr. Soc.*, 398:607–634

Mandelbaum, R., Li, C., Kauffmann, G., and White, S. D. M. (2009a). Halo masses for optically selected and for radio-loud AGN from clustering and galaxy-galaxy lensing. *Mon. Not. R. Astr. Soc.*, 393:377–392

Bridle, S. et al. (2009). Handbook for the GREAT08 Challenge: An image analysis competition for cosmological lensing. *Annals of Applied Statistics*, 3:6–37

2008 Reyes, R., Mandelbaum, R., Hirata, C., Bahcall, N., and Seljak, U. (2008). Improved optical mass tracer for galaxy clusters calibrated using weak lensing measurements. *Mon. Not. R. Astr. Soc.*, 390:1157–1169

Mandelbaum, R., Seljak, U., and Hirata, C. M. (2008b). A halo mass–concentration relation from weak lensing. *J. Cosmology Astropart. Phys.*, 8:006

Mandelbaum, R. et al. (2008a). Precision photometric redshift calibration for galaxy-galaxy weak lensing. *Mon. Not. R. Astr. Soc.*, 386:781–806

2007 Hirata, C. M., Mandelbaum, R., Ishak, M., Seljak, U., Nichol, R., Pimbblet, K. A., Ross, N. P., and Wake, D. (2007). Intrinsic galaxy alignments from the 2SLAQ and SDSS surveys: luminosity and redshift scalings and implications for weak lensing surveys. *Mon. Not. R. Astr. Soc.*, 381:1197–1218

Mandelbaum, R. and Seljak, U. (2007). A robust lower limit on the amplitude of matter fluctuations in the universe from cluster abundance and weak lensing. *J. Cosmology Astropart. Phys.*, 6:024

Massey, R. et al. (2007). The Shear Testing Programme 2: Factors affecting high-precision weak-lensing analyses. *Mon. Not. R. Astr. Soc.*, 376:13–38

2006 Mandelbaum, R., Seljak, U., Cool, R. J., Blanton, M., Hirata, C. M., and Brinkmann, J. (2006c). Density profiles of galaxy groups and clusters from SDSS galaxy-galaxy weak lensing. *Mon. Not. R. Astr. Soc.*, 372:758–776

Mandelbaum, R., Hirata, C. M., Broderick, T., Seljak, U., and Brinkmann, J. (2006a). Ellipticity of dark matter haloes with galaxy-galaxy weak lensing. *Mon. Not. R. Astr. Soc.*, 370:1008–1024

Mandelbaum, R., Seljak, U., Kauffmann, G., Hirata, C. M., and Brinkmann, J. (2006d). Galaxy halo masses and satellite fractions from galaxy-galaxy lensing in the Sloan Digital Sky Survey: stellar mass, luminosity, morphology and environment dependencies. *Mon. Not. R. Astr. Soc.*, 368:715–731

Mandelbaum, R., Hirata, C. M., Ishak, M., Seljak, U., and Brinkmann, J. (2006b). Detection of large-scale intrinsic ellipticity-density correlation from the Sloan Digital Sky Survey and implications for weak lensing surveys. *Mon. Not. R. Astr. Soc.*, 367:611–626

2005 Mandelbaum, R., Tasitsiomi, A., Seljak, U., Kravtsov, A. V., and Wechsler, R. H. (2005b). Galaxy-galaxy lensing: dissipationless simulations versus the halo model. *Mon. Not. R. Astr. Soc.*, 362:1451–1462

Mandelbaum, R., Hirata, C. M., Seljak, U., Guzik, J., Padmanabhan, N., Blake, C., Blanton, M. R., Lupton, R., and Brinkmann, J. (2005a). Systematic errors in weak lensing: application to SDSS galaxy-galaxy weak lensing. *Mon. Not. R. Astr. Soc.*, 361:1287–1322

Seljak, U., Makarov, A., Mandelbaum, R., Hirata, C. M., Padmanabhan, N., McDonald, P., Blanton, M. R., Tegmark, M., Bahcall, N. A., and Brinkmann, J. (2005). SDSS galaxy bias from halo mass-bias relation and its cosmological implications. *Phys. Rev. D*, 71(4):043511

2004 Hirata, C. M., Mandelbaum, R., Seljak, U., Guzik, J., Padmanabhan, N., Blake, C., Brinkmann, J., Budávari, T., Connolly, A., Csabai, I., Scranton, R., and Szalay, A. S. (2004). Galaxy-galaxy weak lensing in the Sloan Digital Sky Survey: intrinsic alignments and shear calibration errors. *Mon. Not. R. Astr. Soc.*, 353:529–549

2003 Mandelbaum, R., McDonald, P., Seljak, U., and Cen, R. (2003). Precision cosmology from the Lyman α forest: power spectrum and bispectrum. *Mon. Not. R. Astr. Soc.*, 344:776–788

Publications in refereed journals: large collaboration papers

2018 Aihara, H. et al. (2018a). First data release of the Hyper Suprime-Cam Subaru Strategic Program. *Publications of the Astronomical Society of Japan*, 70:S8

Aihara, H. et al. (2018b). The Hyper Suprime-Cam SSP Survey: Overview and survey design. *Publications of the Astronomical Society of Japan*, 70:S4

2013 Ross, N. P. et al. (2013). The SDSS-III Baryon Oscillation Spectroscopic Survey: The Quasar Luminosity Function from Data Release Nine. *Astrophys. J.*, 773:14

Dawson, K. S. et al. (2013). The Baryon Oscillation Spectroscopic Survey of SDSS-III. *Astron. J.*, 145:10

2012 Anderson, L. et al. (2012). The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: baryon acoustic oscillations in the Data Release 9 spectroscopic galaxy sample. *Mon. Not. R. Astr. Soc.*, 427:3435–3467

Ahn, C. P. et al. (2012). The Ninth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the SDSS-III Baryon Oscillation Spectroscopic Survey. *Astrophys. J. Supp.*, 203:21

2011 Eisenstein, D. J. et al. (2011). SDSS-III: Massive Spectroscopic Surveys of the Distant Universe, the Milky Way, and Extra-Solar Planetary Systems. *Astron. J.*, 142:72

Aihara, H. et al. (2011). The Eighth Data Release of the Sloan Digital Sky Survey: First Data from SDSS-III. *Astrophys. J. Supp.*, 193:29

2009 Abazajian, K. N. et al. (2009). The Seventh Data Release of the Sloan Digital Sky Survey. *Astrophys. J. Supp.*, 182:543–558

2008 Adelman-McCarthy, J. K. et al. (2008). The Sixth Data Release of the Sloan Digital Sky Survey. *Astrophys. J. Supp.*, 175:297–313

2007 Adelman-McCarthy, J. K. et al. (2007). The Fifth Data Release of the Sloan Digital Sky Survey. *Astrophys. J. Supp.*, 172:634–644

2006 Adelman-McCarthy, J. K. et al. (2006). The Fourth Data Release of the Sloan Digital Sky Survey. *Astrophys. J. Supp.*, 162:38–48

White papers and other non-refereed publications

2018 Doré, O. et al. (2018). WFIRST Science Investigation Team "Cosmology with the High Latitude Survey" Annual Report 2017. *arXiv:1804.03628*

Dawson, K., Frieman, J., Heitmann, K., Jain, B., Kahn, S., Mandelbaum, R., Perlmutter, S., and Slosar, A. (2018). Cosmic Visions Dark Energy: Small Projects Portfolio. *arXiv:1802.07216*

2016 Najita, J. et al. (2016). Maximizing Science in the Era of LSST: A Community-Based Study of Needed US Capabilities. *arXiv:1610.01661*

2015 Jain, B. et al. (2015). The Whole is Greater than the Sum of the Parts: Optimizing the Joint Science Return from LSST, Euclid and WFIRST. *arXiv:1501.07897*

2009 LSST Science Collaboration (2009). LSST Science Book, Version 2.0. *arXiv:0912.0201*

Zhan, H. et al. (2009). Exploring Dark Energy with Next-Generation Photometric Redshift Surveys. In *astro2010: The Astronomy and Astrophysics Decadal Survey*, volume 2010 of *arXiv:0902.2599*

Marshall, P. J. et al. (2009). Dark Matter Structures in the Universe: Prospects for Optical Astronomy in the Next Decade. In *astro2010: The Astronomy and Astrophysics Decadal Survey*, volume 2010 of *ArXiv Astrophysics e-prints*

Zakamska, N. et al. (2009). Challenges Facing Young Astrophysicists. In *astro2010: The Astronomy and Astrophysics Decadal Survey*, volume 2010 of *ArXiv Astrophysics e-prints*

2008 Ivezić, Ž. et al. (2008). LSST: from Science Drivers to Reference Design and Anticipated Data Products. *arXiv:astro-ph/0805.2366*