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1 Personal und Ausstattung

1.1 Personalstand

Lehrstühle:

Prof. Dr. Dr.habil. R. Bender [-6001], Prof. Dr. Dr.habil. A. Burkert [-5992], Prof. Dr. J. Mohr [-5967]

Professoren und Privatdozenten:

Prof. Dr. Dr.habil. R. Bender [-6001], Prof. Dr. T. Birnstiel [-6973], Prof. Dr. Dr.habil. H. Boehringer [-6964], Prof. Dr. Dr.habil. A. Burkert [-5992], PD Dr. Dr.habil. K. Butler [-6018], PD Dr. Dr.habil. G. Chon [-6964], Lehrstuhlvertretung Prof. Dr. W. Dehnen [-6035], PD Dr. Dr.habil. K. Dolag [-5994], Prof. Dr. B. Ercolano [-6974], Prof. Dr. M. Hutchison (W2-Vertretungsprofessur) [-9279], Honorarprofessor Dr. Dr.habil. R.-P. Kudritzki [-6810], Prof. Dr. Dr.habil. H. Lesch [-6007], Prof. Dr. J. Mohr [-5967], Dr. B. Moster (DFG/Emmy-Noether) [9284], Prof. Dr. Dr.habil. A.W.A. Pauldrach [-6021], Prof. Dr. T. Preibisch [-6016], PD Dr. Dr.habil. J. Puls [-6022], PD Dr. Dr.habil. R.P. Saglia [-5998] (MPE), Prof. Dr. J. Weller [-5976]

Wissenschaftliche Mitarbeiter:

Dr. C. Alig [-6966], Dr. H. Barwig [-5974], Dr. M. Behrendt [300003712], Dr. V. Biffi [-6968](DFG), Dr. S. Bocquet [-6034], Dr. J. Dietrich [-5993], Dr. J. Drazkowska (ERC)[-9294], Dr. M. Egelhofer [-6030](EXC), Dr. P. Erwin (MPE), Dr. M. Fabricius (MPE), Dr. D. Farrow (MPE), Dr. R. Gabler [-6019], Dr. J. Gaviria [-5968](EXC), Dr. K. George [-5942], Dr. C. Gössl [-5972], Dr. M. Goto-Egner [-6949](DFG), Dr. T. Grassi [-9279], Dr. F. Grupp [-6005], Dr. V. Guglielmo (MPE), Dr. R. Häfner [-6012], Dr. N. Hamaus [-9294], Dr. T. Hoffmann [-6024], Dr. M. Holzbock (EXC), Dr. U. Hopp [-5997], Dr. H. Israel [-6949], Dr. M. Klein [-5975], Dr. M. Kümmel [-5993], Dr. N. Maddox [-6975], Dr. A. Monna [-5983](BMBF), Dr. A. Obreja [-5918](DFG), Dr. K. Paech [-5895](MPE), Dr. M. Pannella [-6006], Dr. T. Parikh (MPE), Dr. G. Picogna [-9279](DFG), Dr. G. Pollina [-5987], Dr. R. Remus [-6986], Dr. B. Riaz [-6002](DFG), Dr. A. Riffeser [-5973], Dr. A. Sanchez (MPE), Dr. M. Schartmann [-5994](EXC), Dr. S. Seitz [-5996], Dr. J. Snigula [-6027](MPE), Dr.

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Diplomanden und Masteranden:

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Technisches Personal und Softwareentwickler:

Dipl.-Phys. A. Bohnet (MPE), M. Gillhuber (MPE), Dipl.-Ing.(FH) H.J. Hess [-6010], Dr. M. Häuser [5846] (BMBF), Dipl.-Ing.(FH) H. Kravcar [-5971] (BMBF), Dipl. Phys F. Lang-Bardl [-6965], Herbert Ritter [-5986], Dipl.-Phys. J. Richter [-6013], Dr. J. Schlichter [-6011] (BMBF), L. Schneiders-Fesl [-6025], M. Siedschlag [-6095], Dipl.-Phys. M. Wegner [-6020] (BMBF), P. Well [-5988]

Sekretariat und Verwaltung:

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Observatorium Wendelstein [Tel: 08023-]:

Dipl.-Geophys. W. Mitsch [-8198-0], C. Ries [-8198-0], M. Schmidt [-8198-0]

2 Lehrtätigkeit und Prüfungen

2.1 Lehrtätigkeiten

Vertreten durch Prof. Dr. R. Bender, Prof. Dr. T. Birnstiel, Prof. Dr. A. Burkert, PD Dr. K. Butler, Prof. Dr. W. Dehnen, Prof. Dr. B. Ercolano, Prof. Dr. M. Hutchison, Prof. Dr. H. Lesch, Prof. Dr. J. Mohr, Dr. B. Moster, Prof. Dr. A.W.A. Pauldrach, Prof. Dr. Th. Preibisch, PD Dr. J. Puls, PD Dr. R.P. Saglia, und Prof. Dr. J. Weller wurde die Lehre im Gebiet der Physik, Astronomie und Astrophysik an der LMU-München (incl. IMPRS) durchgeführt.

2.2 Prüfungen

Es wurden

18 Naturwissenschaftliche Vorprüfungen in Zahnmedizin,

33 Bachelorprüfungen in Physik,

48 Promotionsprüfungen in Physik und

2 Habilitationen in Physik und Astronomie abgenommen.

3 Wissenschaftliche Arbeiten

3.1 Kosmologie und Strukturbildung

- Langzeitentwicklung von Radiogalaxien in Galaxienhaufen und deren umgebendem Feld (Zeitskala 10 GJ).
  (M. Klein, J. Mohr, M. Pannella)
- Untersuchung von Umgebungseinflüssen auf die Entwicklung von Galaxien.
  (J. Mohr, K. George, M. Klein, N. Maddox, M. Pannella, V. Strazzullo)
- Kosmologische Beobachtungen und Untersuchungen zur Expansionsgeschichte des Universums sowie zur Bildung großräumiger Strukturen.
  (J. Weller, R. Bender, S. Seitz, J. Mohr, S. Bocquet, J. Dietrich, M. Klein, V. Strazzullo, A. Pauldrach, T. Hoffmann)
- Beobachtungen und Interpretation zur Verteilung kosmischer Hohlräume.
  (J. Weller)
- Entwicklung und Anwendung von "Machine Learning" Methoden zur Bestimmung photometrischer Rotverschiebungen.
  (J. Weller, S. Seitz)
- Untersuchungen zur Ionisierungsgeschichte des Universums mit Hilfe der kosmischen Hintergrundstrahlung.
  (J. Weller)
- Untersuchung und kosmologische Beobachtung der Dunklen Energie und modifizierter Gravitation.
  (J. Weller, S. Seitz, R. Bender, J. Mohr, S. Bocquet, M. Klein, B. Moster)

3.2 Extragalaktische Astronomie

- Beobachtungen und Untersuchungen der Struktur, Dynamik und Entwicklung von Galaxien und Galaxienhaufen unter Berücksichtigung von Dunkler Energie, Dunkler Materie, Gravitationslinsen und Schwarzen Löchern.
  (R. Bender, R.P. Saglia, S. Seitz, U. Hopp, J. Weller, A. Riffeser, J. Mohr, S. Bocquet, J. Dietrich, M. Klein, N. Maddox, M. Panella, V. Strazzullo)
- Chemische Entwicklung und Entfernung von Galaxien mit aktiver Sternentstehung.
  (R.-P. Kudritzki)
- Entwicklung empirischer Modelle und "Machine Learning" Methoden zur Entstehung und Entwicklung von Galaxien.
  (B. Moster)
- Numerische Simulationen zur Entstehung und Entwicklung von Galaxien, Galaxiengruppen und -haufen und Strukturbildung.
  (A. Burkert, K. Dolag, J. Weller, S. Bocquet, B. Moster)

3.3 Sterne und Planeten

- Suche nach extrasolaren Planeten.
  (R. Bender, R.P. Saglia, A. Riffeser, F. Grupp)
- Numerische Simulationen zur Stern- und Planetenentstehung und zur chemischen Entwicklung protoplanetarer Scheiben.
  (B. Ercolano, T. Birnstiel, A. Burkert)
- Beobachtungen von Sternen sowie Untersuchungen zu deren Struktur, Entstehung, Entwicklung und Endphasen.
  (A. Burkert, T. Preibisch, B. Ercolano, R.-P. Kudritzki, A. Pauldrach, J. Puls, K. Butler, T. Hoffmann, A. Riffeser, R. Bender, S. Seitz, U. Hopp, C. Gössl)

3.4 Plasma-Astrophysik

- Untersuchungen zur Dynamik von Magnetfeldern in ionisierten Plasmen mit Staub und Neutralgas.
(H. Lesch, K. Dolag)

3.5 Instrumentenentwicklung

- Entwicklung von Spektrographen sowie Instrumenten-Bau für moderne Teleskope.
(R. Bender, A. Hess, F. Grupp, C. Gössl, F. Lang, U. Hopp, A. Riffeser)
- Betrieb des Wendelsteinobservatoriums durch zwei Teleskope mit 2m und 40cm Hauptspiegeldurchmesser.
(R. Bender, U. Hopp, W. Mitsch, A. Riffeser, C. Gössl, F. Lang, C. Ries, M. Schmidt)
- Entwicklung von Algorithmen und Software für die ESA Euclid Mission
(K. George, H. Israel, M. Kuemmel, J. Mohr, T. Vassallo)
- Entwicklung von Algorithmen sowie Software für den SKA-Vorläufer D-MeerKAT.
(M. Klein, N. Maddox, J. Mohr, M. Pannella, V. Strazzullo)

4 Masterarbeiten, Diplomarbeiten, Dissertationen, Habilitationen

4.1 Masterarbeiten, Diplomarbeiten

Abgeschlossen:

Diehl, Johannes: Constraining Axion Cosmologies with Galaxy Clusters. München, USM, Masterarbeit, 2019

Djamali, Alexander: Template free analysis of LIGO gravitational waves. München, USM, Masterarbeit, 2019

Ferrer, Bernat: Constraints on gap opening timescales in the HD163296 protoplanetary disk. München, USM, Masterarbeit, 2019

Förster, Pascal: Planes of satellite galaxies in large-scale cosmological simulations. München, USM, Masterarbeit, 2019

Hofmann, Andreas: Long-period variable stars in the Andromeda Galaxy Period-Luminosity Relation. München, USM, Masterarbeit, 2019

Mayr, Benedikt: Luminosity monitoring of stars in M42 - Orion Nebula with WST data. München, USM, Masterarbeit, 2019

Mehrgan, Kianusch: The faint center of Holm15A: the dynamical fingerprints of the largest supermassive black hole known so far? München, USM, Masterarbeit, 2019

Pentaris, Giorgios: Dark Matter in Dwarf Elliptical Galaxies. München, USM, Masterarbeit, 2019

Steuer, Jana: Wendelstein 1b+2b: confirming transiting exoplanets with multiband photometry. München, USM, Masterarbeit, 2019

Sextl, Eva: Constraining Modified Gravity Models with Blue Supergiant Stars. München, USM, Masterarbeit, 2019

von Wedemeyer, Carl Constantin: Density Estimation for the Generation of Simulated Galaxy Clusters & Strong Galaxy-Galaxy Gravitational Lens Finding Based on Photometry. München, USM, Masterarbeit, 2019

Weiler, Malwin: Anomaly Detection in the Gaia Catalog. München, USM, Masterarbeit, 2019

4.2 Dissertationen

Abgeschlossen:

Behrendt, Manuel: High-Redshift Star-Forming Galaxies. München, USM, Dissertation, 2019

Capasso, Raffaella: Galaxy Clusters: a Dynamical Perspective. München, USM, Dissertation, 2019

Grandis, Sebastian: Cosmological Studies with Galaxy Clusters at X-ray, optical and millimeter wavelengths. München, USM, Dissertation, 2019

Häuser, Marco: Radial velocity measurements for white-dwarf/brown-dwarf binary candidates and development of an active mirror control for the 11 m Hobby-Eberly-Telescope. München, USM, Dissertation, 2019

Heigl, Stefan: Fragmentation in Interstellar Filaments. München, USM, Dissertation, 2019

5 Veröffentlichungen

5.1 In referierten Zeitschriften

Abbott, T. M. C., Abdalla, F. B., Alarcon, A., et al.: *Dark Energy Survey Year 1 Results: Measurement of the Baryon Acoustic Oscillation scale in the distribution of galaxies to redshift 1.* MNRAS **483**, 4866 (2019)

Abbott, T. M. C., Abdalla, F. B., Alarcon, A., et al.: *Dark Energy Survey year 1 results: Joint analysis of galaxy clustering, galaxy lensing, and CMB lensing two-point functions.* Phys. Rev. D **100**, 023541 (2019)

Abbott, T. M. C., Abdalla, F. B., Allam, S., et al.: *The Dark Energy Survey: Data Release 1.* ApJS **239**, 18 (2018)

Abbott, T. M. C., Abdalla, F. B., Avila, S., et al.: *Dark Energy Survey year 1 results: Constraints on extended cosmological models from galaxy clustering and weak lensing.* Phys. Rev. D **99**, 123505 (2019)

Abbott, T. M. C., Alarcon, A., Allam, S., et al.: *Cosmological Constraints from Multiple Probes in the Dark Energy Survey.* Phys. Rev. Lett. **122**, 171301 (2019)

Abbott, T. M. C., Allam, S., Andersen, P., et al.: *First Cosmology Results using Type Ia Supernovae from the Dark Energy Survey: Constraints on Cosmological Parameters.* ApJ **872**, L30 (2019)

Abdul-Masih, M., Sana, H., Sundqvist, J., et al.: *Clues on the Origin and Evolution of Massive Contact Binaries: Atmosphere Analysis of VFTS 352.* ApJ **880**, 115 (2019)

Alig, C., Hammer, S., Borodatchenkova, N., et al.: *Simulating the Impact of the Smith Cloud.* ApJ **869**, L2 (2018)

Andrews, S. M., Huang, J., Pérez, L. M., et al.: *The Disk Substructures at High Angular Resolution Project (DSHARP). I. Motivation, Sample, Calibration, and Overview.* ApJ **869**, L41 (2018)

Angus, C. R., Smith, M., Sullivan, M., et al.: *Superluminous supernovae from the Dark Energy Survey.* MNRAS **487**, 2215 (2019)

Arora, N., Fossati, M., Fontanot, F., et al.: *On the role of supermassive black holes in quenching star formation in local central galaxies.* MNRAS **489**, 1606 (2019)

Arrigoni Battaia, F., Obreja, A., Prochaska, J. X., et al.: *Discovery of intergalactic bridges connecting two faint $z \sim 3$ quasars.* A&A **631**, A18 (2019)

Arthur, J., Pearce, F. R., Gray, M. E., et al.: *TheThreeHundred Project: ram pressure and gas content of haloes and subhaloes in the phase-space plane.* MNRAS **484**, 3968 (2019)

Bassini, L., Rasia, E., Borgani, S., et al.: *Black hole mass of central galaxies and cluster mass correlation in cosmological hydro-dynamical simulations.* A&A **630**, A144 (2019)

Behrendt, M., Schartmann, M., Burkert, A.: *The possible hierarchical scales of observed clumps in high-redshift disc galaxies.* MNRAS **488**, 306 (2019)

Biffi, V., Dolag, K., Merloni, A.: *AGN contamination of galaxy-cluster thermal X-ray emission: predictions for eRosita from cosmological simulations.* MNRAS **481**, 2213 (2018)

Birnstiel, T., Dullemond, C. P., Zhu, Z., et al.: *The Disk Substructures at High Angular Resolution Project (DSHARP). V. Interpreting ALMA Maps of Protoplanetary Disks in Terms of a Dust Model.* ApJ **869**, L45 (2018)

Birrer, S., Treu, T., Rusu, C. E., et al.: *H0LiCOW – IX. Cosmographic analysis of the doubly imaged quasar SDSS 1206+4332 and a new measurement of the Hubble constant.* MNRAS **484**, 4726 (2019)

Blaña Díaz, M., Gerhard, O., Wegg, C., et al.: *Sculpting Andromeda – made-to-measure models for M31's bar and composite bulge: dynamics, stellar and dark matter mass.* MNRAS **481**, 3210 (2018)

Blank, M., Macciò, A. V., Dutton, A. A., et al.: *NIHAO – XXII. Introducing black hole formation, accretion, and feedback into the NIHAO simulation suite.* MNRAS **487**, 5476 (2019)

Blot, L., Crocce, M., Sefusatti, E., et al.: *Comparing approximate methods for mock catalogues and covariance matrices II: power spectrum multipoles.* MNRAS **485**, 2806 (2019)

Bocquet, S., Dietrich, J. P., Schrabback, T., et al.: *Cluster Cosmology Constraints from the 2500 deg^2 SPT-SZ Survey: Inclusion of Weak Gravitational Lensing Data from Magellan and the Hubble Space Telescope.* ApJ **878**, 55 (2019)

Bowler, B. P., Hinkley, S., Ziegler, C., et al.: *The Elusive Majority of Young Moving Groups. I. Young Binaries and Lithium-rich Stars in the Solar Neighborhood.* ApJ **877**, 60 (2019)

Brout, D., Scolnic, D., Kessler, R., et al.: *First Cosmology Results Using SNe Ia from the Dark Energy Survey: Analysis, Systematic Uncertainties, and Validation.* ApJ **874**, 150 (2019)

Buck, T., Macciò, A. V., Dutton, A. A., et al.: *NIHAO XV: the environmental impact of the host galaxy on galactic satellite and field dwarf galaxies.* MNRAS **483**, 1314 (2019)

Buck, T., Ness, M., Obreja, A., et al.: *Stars behind Bars II: A Cosmological Formation Scenario for the Milky Way's Central Stellar Structure.* ApJ **874**, 67 (2019)

Buck, T., Obreja, A., Macciò, A. V., et al.: *NIHAO-UHD: The properties of MW-like stellar disks in high resolution cosmological simulations.* MNRAS2827 (2019)

Bulbul, E., Chiu, I. N., Mohr, J. J., et al.: *X-Ray Properties of SPT-selected Galaxy Clusters at $0.2 < z < 1.5$ Observed with XMM-Newton.* ApJ **871**, 50 (2019)

Camacho, H., Kokron, N., Andrade-Oliveira, F., et al.: *Dark Energy Survey Year 1 results: measurement of the galaxy angular power spectrum.* MNRAS **487**, 3870 (2019)

Capasso, R., Mohr, J. J., Saro, A., et al.: *Erratum: Mass calibration of the CODEX cluster sample using SPIDERS spectroscopy – I. The richness-mass relation.* MNRAS **488**, 481 (2019)

Capasso, R., Mohr, J. J., Saro, A., et al.: *Mass calibration of the CODEX cluster sample using SPIDERS spectroscopy – I. The richness-mass relation.* MNRAS **486**, 1594 (2019)

Capasso, R., Saro, A., Mohr, J. J., et al.: *Galaxy kinematics and mass calibration in massive SZE-selected galaxy clusters to z = 1.3.* MNRAS **482**, 1043 (2019)

Carneiro, L. P., Puls, J., Hoffmann, T. L., et al.: *Surface abundances of CNO in Galactic O-stars: a pilot study with FASTWIND.* A&A **623**, A3 (2019)

Castignani, G., Combes, F., Salomé, P., et al.: *Molecular gas in two companion cluster galaxies at z = 1.2 (Corrigendum).* A&A **620**, C4 (2018)

Cawthon, R., Davis, C., Gatti, M., et al.: *Dark Energy Survey Year 1 Results: calibration of redMaGiC redshift distributions in DES and SDSS from cross-correlations.* MNRAS **481**, 2427 (2018)

Chan, K. C., Hamaus, N., Biagetti, M.: *Constraint of void bias on primordial non-Gaussianity.* Phys. Rev. D **99**, 121304 (2019)

Chen, H. H.-H., Pineda, J. E., Goodman, A. A., et al.: *Droplets. I. Pressure-dominated Coherent Structures in L1688 and B18.* ApJ **877**, 93 (2019)

Cibinel, A., Daddi, E., Sargent, M. T., et al.: *Early- and late-stage mergers among main sequence and starburst galaxies at 0.2 ≤ z ≤ 2.* MNRAS **485**, 5631 (2019)

Cilibrasi, M., Szulágyi, J., Mayer, L., et al.: *Satellites form fast & late: a population synthesis for the Galilean moons.* MNRAS **480**, 4355 (2018)

Colavincenzo, M., Sefusatti, E., Monaco, P., et al.: *Comparing approximate methods for mock catalogues and covariance matrices – III: bispectrum.* MNRAS **482**, 4883 (2019)

Coogan, R. T., Sargent, M. T., Daddi, E., et al.: *Suppressed CO emission and high G/D ratios in z = 2 galaxies with sub-solar gas-phase metallicity.* MNRAS **485**, 2092 (2019)

Costanzi, M., Rozo, E., Rykoff, E. S., et al.: *Modelling projection effects in optically selected cluster catalogues.* MNRAS **482**, 490 (2019)

Costanzi, M., Rozo, E., Simet, M., et al.: *Methods for cluster cosmology and application to the SDSS in preparation for DES Year 1 release.* MNRAS **488**, 4779 (2019)

Cousinou, M. C., Pisani, A., Tilquin, A., et al.: *Multivariate analysis of cosmic void characteristics.* Astronomy and Computing **27**, 53 (2019)

Crocce, M., Ross, A. J., Sevilla-Noarbe, I., et al.: *Dark Energy Survey year 1 results: galaxy sample for BAO measurement.* MNRAS **482**, 2807 (2019)

Cucchetti, E., Pointecouteau, E., Peille, P., et al.: *Athena X-IFU synthetic observations of galaxy clusters to probe the chemical enrichment of the Universe.* A&A **620**, A173 (2018)

Cuello, N., Montesinos, M., Stammler, S. M., et al.: *Dusty spirals triggered by shadows in transition discs.* A&A **622**, A43 (2019)

Davies, R. L., Förster Schreiber, N. M., Übler, H., et al.: *Kiloparsec Scale Properties of Star Formation Driven Outflows at z ∼ 2.3 in the SINS/zC-SINF AO Survey.* ApJ **873**, 122 (2019)

De Rijcke, S., Fouvry, J.-B., Dehnen, W.: *How gravitational softening affects galaxy stability – I. Linear mode analysis of disc galaxies.* MNRAS **485**, 150 (2019)

Dietrich, J. P., Bocquet, S., Schrabback, T., et al.: *Sunyaev-Zel'dovich effect and X-ray scaling relations from weak lensing mass calibration of 32 South Pole Telescope selected galaxy clusters.* MNRAS **483**, 2871 (2019)

Doctor, Z., Kessler, R., Herner, K., et al.: *A Search for Optical Emission from Binary Black Hole Merger GW170814 with the Dark Energy Camera.* ApJ **873**, L24 (2019)

Domínguez Sánchez, H., Huertas-Company, M., Bernardi, M., et al.: *Transfer learning for galaxy morphology from one survey to another.* MNRAS **484**, 93 (2019)

Drazkowska, J., Li, S., Birnstiel, T., et al.: *Including Dust Coagulation in Hydrodynamic Models of Protoplanetary Disks: Dust Evolution in the Vicinity of a Jupiter-mass Planet.* ApJ **885**, 91 (2019)

Dullemond, C. P., Birnstiel, T., Huang, J., et al.: *The Disk Substructures at High Angular Resolution Project (DSHARP). VI. Dust Trapping in Thin-ringed Protoplanetary Disks.* ApJ **869**, L46 (2018)

Dutton, A. A., Macciò, A. V., Buck, T., et al.: *NIHAO XX: the impact of the star formation threshold on the cusp-core transformation of cold dark matter haloes.* MNRAS **486**, 655 (2019)

Dutton, A. A., Macciò, A. V., Obreja, A., et al.: *NIHAO – XVIII. Origin of the MOND phenomenology of galactic rotation curves in a ΛCDM universe.* MNRAS **485**, 1886 (2019)

Dutton, A. A., Obreja, A., Macciò, A. V.: *NIHAO – XVII. The diversity of dwarf galaxy kinematics and implications for the H I velocity function.* MNRAS **482**, 5606 (2019)

Erfanianfar, G., Finoguenov, A., Furnell, K., et al.: *Stellar mass-halo mass relation for the brightest central galaxies of X-ray clusters since $z \sim 0.65$.* A&A **631**, A175 (2019)

Erwin, P.: *What determines the sizes of bars in spiral galaxies?* MNRAS **489**, 3553 (2019)

Euclid Collaboration, Adam, R., Vannier, M., et al.: *Euclid preparation. III. Galaxy cluster detection in the wide photometric survey, performance and algorithm selection.* A&A **627**, A23 (2019)

Euclid Collaboration, Barnett, R., Warren, S. J., et al.: *Euclid preparation. V. Predicted yield of redshift $7 < z < 9$ quasars from the wide survey.* A&A **631**, A85 (2019)

Euclid Collaboration, Martinet, N., Schrabback, T., et al.: *Euclid preparation. IV. Impact of undetected galaxies on weak-lensing shear measurements.* A&A **627**, A59 (2019)

Farrell, E. J., Groh, J. H., Meynet, G., et al.: *Impact of binary interaction on the evolution of blue supergiants. The flux-weighted gravity luminosity relationship and extragalactic distance determinations.* A&A **621**, A22 (2019)

Fletcher, M., Nayakshin, S., Stamatellos, D., et al.: *Giant planets and brown dwarfs on wide orbits: a code comparison project.* MNRAS **486**, 4398 (2019)

Förster Schreiber, N. M., Übler, H., Davies, R. L., et al.: *The KMOS^{3D} Survey: Demographics and Properties of Galactic Outflows at $z = 0.6$–2.7.* ApJ **875**, 21 (2019)

Fossati, M., Fumagalli, M., Gavazzi, G., et al.: *MUSE sneaks a peek at extreme ram-pressure stripping events – IV. Hydrodynamic and gravitational interactions in the Blue Infalling Group.* MNRAS **484**, 2212 (2019)

Freundlich, J., Combes, F., Tacconi, L. J., et al.: *PHIBSS2: survey design and $z = 0.5$–0.8 results. Molecular gas reservoirs during the winding-down of star formation.* A&A **622**, A105 (2019)

Gárate, M., Birnstiel, T., Stammler, S. M., et al.: *The Dimming of RW Auriga: Is Dust Accretion Preceding an Outburst?* ApJ **871**, 53 (2019)

Geballe, T. R., Lambrides, E., Schlegelmilch, B., et al.: *Background Infrared Sources for Studying the Galactic Center's Interstellar Gas.* ApJ **872**, 103 (2019)

Gillessen, S., Plewa, P. M., Widmann, F., et al.: *Detection of a Drag Force in G2's Orbit: Measuring the Density of the Accretion Flow onto Sgr A* at 1000 Schwarzschild Radii.* ApJ **871**, 126 (2019)

Giuliano, B. M., Gavdush, A. A., Müller, B., et al.: *Broadband spectroscopy of astrophysical ice analogues. I. Direct measurement of the complex refractive index of CO ice using terahertz time-domain spectroscopy.* A&A **629**, A112 (2019)

Gobat, R., Daddi, E., Coogan, R. T., et al.: *Sunyaev-Zel'dovich detection of the galaxy cluster Cl J1449+0856 at z = 1.99: The pressure profile in uv space.* A&A **629**, A104 (2019)

González, J. F., Briquet, M., Przybilla, N., et al.: *HD 96446: a long-period binary with a strongly magnetic He-rich primary with β Cephei pulsations.* A&A **626**, A94 (2019)

Gozaliasl, G., Finoguenov, A., Tanaka, M., et al.: *Chandra centres for COSMOS X-ray galaxy groups: differences in stellar properties between central dominant and offset brightest group galaxies.* MNRAS **483**, 3545 (2019)

Grandis, S., Mohr, J. J., Dietrich, J. P., et al.: *Impact of weak lensing mass calibration on eROSITA galaxy cluster cosmological studies – a forecast.* MNRAS **488**, 2041 (2019)

Grassi, T., Padovani, M., Ramsey, J. P., et al.: *The challenges of modelling microphysics: ambipolar diffusion, chemistry, and cosmic rays in MHD shocks.* MNRAS **484**, 161 (2019)

Green, S. B., Ntampaka, M., Nagai, D., et al.: *Using X-Ray Morphological Parameters to Strengthen Galaxy Cluster Mass Estimates via Machine Learning.* ApJ **884**, 33 (2019)

Gruen, D., Zhang, Y., Palmese, A., et al.: *Dark Energy Survey Year 1 results: the effect of intracluster light on photometric redshifts for weak gravitational lensing.* MNRAS **488**, 4389 (2019)

Grylls, P. J., Shankar, F., Leja, J., et al.: *Predicting fully self-consistent satellite richness, galaxy growth and starformation rates from the STastical sEmi-Empirical modeL STEEL.* MNRAS2560 (2019)

Guzmán, V. V., Huang, J., Andrews, S. M., et al.: *The Disk Substructures at High Angular Resolution Program (DSHARP). VIII. The Rich Ringed Substructures in the AS 209 Disk.* ApJ **869**, L48 (2018)

Hagstotz, S., Costanzi, M., Baldi, M., et al.: *Joint halo-mass function for modified gravity and massive neutrinos – I. Simulations and cosmological forecasts.* MNRAS **486**, 3927 (2019)

Hagstotz, S., Gronke, M., Mota, D. F., et al.: *Breaking cosmic degeneracies: Disentangling neutrinos and modified gravity with kinematic information.* A&A **629**, A46 (2019)

Hands, T. O., Dehnen, W., Gration, A., et al.: *The fate of planetesimal discs in young open clusters: implications for 1I/'Oumuamua, the Kuiper belt, the Oort cloud, and more.* MNRAS **490**, 21 (2019)

Hearin, A., Behroozi, P., Kravtsov, A., et al.: *Clustering constraints on the relative sizes of central and satellite galaxies.* MNRAS **489**, 1805 (2019)

Herrera-Camus, R., Tacconi, L., Genzel, R., et al.: *Molecular and Ionized Gas Phases of an AGN-driven Outflow in a Typical Massive Galaxy at $z \approx 2$.* ApJ **871**, 37 (2019)

Ho, I. T., Kreckel, K., Meidt, S. E., et al.: *Mapping Electron Temperature Variations across a Spiral Arm in NGC 1672.* ApJ **885**, L31 (2019)

Hollowood, D. L., Jeltema, T., Chen, X., et al.: *Chandra Follow-up of the SDSS DR8 Redmapper Catalog Using the MATCha Pipeline.* ApJS **244**, 22 (2019)

Hoormann, J. K., Martini, P., Davis, T. M., et al.: *C IV black hole mass measurements with the Australian Dark Energy Survey (OzDES).* MNRAS **487**, 3650 (2019)

Hoyle, B., Rau, M. M.: *Self-consistent redshift estimation using correlation functions without a spectroscopic reference sample.* MNRAS **485**, 3642 (2019)

Hsu, L.-T., Lin, L., Dickinson, M., et al.: *Near-infrared Survey and Photometric Redshifts in the Extended GOODS-North Field.* ApJ **871**, 233 (2019)

Huang, J., Andrews, S. M., Dullemond, C. P., et al.: *The Disk Substructures at High Angular Resolution Project (DSHARP). II. Characteristics of Annular Substructures.* ApJ **869**, L42 (2018)

Huang, J., Andrews, S. M., Pérez, L. M., et al.: *The Disk Substructures at High Angular Resolution Project (DSHARP). III. Spiral Structures in the Millimeter Continuum of the Elias 27, IM Lup, and WaOph 6 Disks.* ApJ **869**, L43 (2018)

Huber, K., Tchernin, C., Merten, J., et al.: *Joint cluster reconstructions. Combing free-form lensing and X-rays.* A&A **627**, A143 (2019)

Isella, A., Huang, J., Andrews, S. M., et al.: *The Disk Substructures at High Angular Resolution Project (DSHARP). IX. A High-definition Study of the HD 163296 Planet-forming Disk.* ApJ **869**, L49 (2018)

Jacobs, C., Collett, T., Glazebrook, K., et al.: *An Extended Catalog of Galaxy-Galaxy Strong Gravitational Lenses Discovered in DES Using Convolutional Neural Networks.* ApJS **243**, 17 (2019)

Jacobs, C., Collett, T., Glazebrook, K., et al.: *Finding high-redshift strong lenses in DES using convolutional neural networks.* MNRAS **484**, 5330 (2019)

Karademir, G. S., Remus, R.-S., Burkert, A., et al.: *The outer stellar halos of galaxies: how radial merger mass deposition, shells, and streams depend on infall-orbit configurations.* MNRAS **487**, 318 (2019)

Katebi, R., Chornock, R., Berger, E., et al.: *PS1-13cbe: the rapid transition of a Seyfert 2 to a Seyfert 1.* MNRAS **487**, 4057 (2019)

Khullar, G., Bleem, L. E., Bayliss, M. B., et al.: *Spectroscopic Confirmation of Five Galaxy Clusters at $z > 1.25$ in the 2500 deg^2 SPT-SZ Survey.* ApJ **870**, 7 (2019)

Klein, M., Grandis, S., Mohr, J. J., et al.: *A new RASS galaxy cluster catalogue with low contamination extending to z 1 in the DES overlap region.* MNRAS **488**, 739 (2019)

Klein, M., Israel, H., Nagarajan, A., et al.: *Weak lensing measurements of the APEX-SZ galaxy cluster sample.* MNRAS **488**, 1704 (2019)

Kormendy, J., Bender, R.: *Structural Analogs of the Milky Way Galaxy: Stellar Populations in the Boxy Bulges of NGC 4565 and NGC 5746.* ApJ **872**, 106 (2019)

Kovács, A., Sánchez, C., García-Bellido, J., et al.: *More out of less: an excess integrated Sachs-Wolfe signal from supervoids mapped out by the Dark Energy Survey.* MNRAS **484**, 5267 (2019)

Kummer, J., Brüggen, M., Dolag, K., et al.: *Simulations of core formation for frequent dark matter self-interactions.* MNRAS **487**, 354 (2019)

Lee, S., Huff, E. M., Ross, A. J., et al.: *Producing a BOSS CMASS sample with DES imaging.* MNRAS **489**, 2887 (2019)

Lenz, C. T., Klahr, H., Birnstiel, T.: *Planetesimal Population Synthesis: Pebble Flux-regulated Planetesimal Formation.* ApJ **874**, 36 (2019)

Li, Y.-P., Li, H., Ricci, L., et al.: *Effects of Ringed Structures and Dust Size Growth on Millimeter Observations of Protoplanetary Disks.* ApJ **878**, 39 (2019)

Lippich, M., Sánchez, A. G., Colavincenzo, M., et al.: *Comparing approximate methods for mock catalogues and covariance matrices – I. Correlation function.* MNRAS **482**, 1786 (2019)

Lotz, M., Remus, R.-S., Dolag, K., et al.: *Gone after one orbit: How cluster environments quench galaxies.* MNRAS **488**, 5370 (2019)

Lyskova, N., Churazov, E., Zhang, C., et al.: *Close-up view of an ongoing merger between the NGC 4839 group and the Coma cluster – a post-merger scenario.* MNRAS **485**, 2922 (2019)

Macaulay, E., Nichol, R. C., Bacon, D., et al.: *First cosmological results using Type Ia supernovae from the Dark Energy Survey: measurement of the Hubble constant.* MNRAS **486**, 2184 (2019)

Macciò, A. V., Frings, J., Buck, T., et al.: *The edge of galaxy formation III: the effects of warm dark matter on Milky Way satellites and field dwarfs.* MNRAS **484**, 5400 (2019)

Mancini, C., Daddi, E., Juneau, S., et al.: *Rejuvenated galaxies with very old bulges at the origin of the bending of the main sequence and of the 'green valley'.* MNRAS **489**, 1265 (2019)

Marshall, J. L., Hansen, T., Simon, J. D., et al.: *Chemical Abundance Analysis of Tucana III, the Second r-process Enhanced Ultra-faint Dwarf Galaxy.* ApJ **882**, 177 (2019)

Marzari, F., D'Angelo, G., Picogna, G.: *Circumstellar Dust Distribution in Systems with Two Planets in Resonance.* AJ **157**, 45 (2019)

McClintock, T., Varga, T. N., Gruen, D., et al.: *Dark Energy Survey Year 1 results: weak lensing mass calibration of redMaPPer galaxy clusters.* MNRAS **482**, 1352 (2019)

McDonald, M., Allen, S. W., Hlavacek-Larrondo, J., et al.: *A Detailed Study of the Most Relaxed SPT-selected Galaxy Clusters: Properties of the Cool Core and Central Galaxy.* ApJ **870**, 85 (2019)

Miley, J. M., Panić, O., Haworth, T. J., et al.: *Asymmetric mid-plane gas in ALMA images of HD 100546.* MNRAS **485**, 739 (2019)

Mitsuishi, I., Babazaki, Y., Ota, N., et al.: *High entropy and evidence for a merger in the low surface brightness cluster Abell 2399.* PASJ **70**, 112 (2018)

Monsch, K., Ercolano, B., Picogna, G., et al.: *The imprint of X-ray photoevaporation of planet-forming discs on the orbital distribution of giant planets.* MNRAS **483**, 3448 (2019)

Morgan, R., Bechtol, K., Kessler, R., et al.: *A DECam Search for Explosive Optical Transients Associated with IceCube Neutrino Alerts.* ApJ **883**, 125 (2019)

Morice-Atkinson, X., Hoyle, B., Bacon, D.: *Learning from the machine: interpreting machine learning algorithms for point- and extended-source classification.* MNRAS **481**, 4194 (2018)

Moriya, T. J., Wong, K. C., Koyama, Y., et al.: *Searches for Population III pair-instability supernovae: Predictions for ULTIMATE-Subaru and WFIRST.* PASJ **71**, 59 (2019)

Mostoghiu, R., Knebe, A., Cui, W., et al.: *The Three Hundred Project: The evolution of galaxy cluster density profiles.* MNRAS **483**, 3390 (2019)

Munoz, M. S., Wade, G. A., Nazé, Y., et al.: *Modelling the photometric variability of magnetic massive stars with the Analytical Dynamical Magnetosphere model.* MNRAS2573 (2019)

Nagarajan, A., Pacaud, F., Sommer, M., et al.: *Weak-lensing mass calibration of the Sunyaev-Zel'dovich effect using APEX-SZ galaxy clusters.* MNRAS **488**, 1728 (2019)

Nakoneczny, S., Bilicki, M., Solarz, A., et al.: *Catalog of quasars from the Kilo-Degree Survey Data Release 3.* A&A **624**, A13 (2019)

Obreja, A., Dutton, A. A., Macciò, A. V., et al.: *NIHAO XVI: the properties and evolution of kinematically selected discs, bulges, and stellar haloes.* MNRAS **487**, 4424 (2019)

Ogiya, G., van den Bosch, F. C., Hahn, O., et al.: *DASH: a library of dynamical subhalo evolution.* MNRAS **485**, 189 (2019)

Omori, Y., Baxter, E. J., Chang, C., et al.: *Dark Energy Survey Year 1 Results: Cross-correlation between Dark Energy Survey Y1 galaxy weak lensing and South Pole Telescope + Planck CMB weak lensing.* Phys. Rev. D **100**, 043517 (2019)

Omori, Y., Giannantonio, T., Porredon, A., et al.: *Dark Energy Survey Year 1 Results: Tomographic cross-correlations between Dark Energy Survey galaxies and CMB lensing from South Pole Telescope + Planck.* Phys. Rev. D **100**, 043501 (2019)

Pan, H., Jarvis, M. J., Allison, J. R., et al.: *Measuring the H I mass function below the detection threshold.* MNRAS2626 (2019)

Pandey, S., Baxter, E. J., Xu, Z., et al.: *Constraints on the redshift evolution of astrophysical feedback with Sunyaev-Zel'dovich effect cross-correlations.* Phys. Rev. D **100**, 063519 (2019)

Pérez, L. M., Benisty, M., Andrews, S. M., et al.: *The Disk Substructures at High Angular Resolution Project (DSHARP). X. Multiple Rings, a Misaligned Inner Disk, and a Bright Arc in the Disk around the T Tauri star HD 143006.* ApJ **869**, L50 (2018)

Petit dit de la Roche, D. J. M., van den Ancker, M. E., Kissler-Patig, M., et al.: *New constraints on the HR 8799 planetary system from mid-infrared direct imaging.* MNRAS2709 (2019)

Picogna, G., Ercolano, B., Owen, J. E., et al.: *The dispersal of protoplanetary discs – I. A new generation of X-ray photoevaporation models.* MNRAS **487**, 691 (2019)

Pollina, G., Hamaus, N., Paech, K., et al.: *On the relative bias of void tracers in the Dark Energy Survey.* MNRAS **487**, 2836 (2019)

Popesso, P., Concas, A., Morselli, L., et al.: *The main sequence of star-forming galaxies – I. The local relation and its bending.* MNRAS **483**, 3213 (2019)

Prat, J., Baxter, E., Shin, T., et al.: *Cosmological lensing ratios with DES Y1, SPT, and Planck.* MNRAS **487**, 1363 (2019)

Prieto, M. A., Fernandez-Ontiveros, J. A., Bruzual, G., et al.: *From kpcs to the central parsec of NGC 1097: feeding star formation and a black hole at the same time.* MNRAS **485**, 3264 (2019)

Ragagnin, A., Dolag, K., Moscardini, L., et al.: *Dependency of halo concentration on mass, redshift and fossilness in Magneticum hydrodynamic simulations.* MNRAS **486**, 4001 (2019)

Raghunathan, S., Patil, S., Baxter, E., et al.: *Detection of CMB-Cluster Lensing using Polarization Data from SPTpol.* Phys. Rev. Lett. **123**, 181301 (2019)

Raghunathan, S., Patil, S., Baxter, E., et al.: *Mass Calibration of Optically Selected DES Clusters Using a Measurement of CMB-cluster Lensing with SPTpol Data.* ApJ **872**, 170 (2019)

Reed, S. L., Banerji, M., Becker, G. D., et al.: *Three new VHS-DES quasars at $6.7 < z < 6.9$ and emission line properties at $z > 6.5$.* MNRAS **487**, 1874 (2019)

Rehmann, R. L., Gruen, D., Seitz, S., et al.: *The Wendelstein Weak Lensing (WWL) pathfinder: accurate weak lensing masses for Planck clusters.* MNRAS **486**, 77 (2019)

Riaz, B., Machida, M. N., Stamatellos, D.: *ALMA reveals a pseudo-disc in a proto-brown dwarf.* MNRAS **486**, 4114 (2019)

Riaz, B., Thi, W. F., Caselli, P.: *Chemical tracers in proto-brown dwarfs: CO, ortho-H_2CO, para-H_2CO, HCO^+, CS observations.* MNRAS **483**, 1139 (2019)

Riaz, B., Thi, W. F., Caselli, P.: *Chemical tracers in proto-brown dwarfs: CN, HCN, and HNC observations.* MNRAS **481**, 4662 (2018)

Rich, E. A., Wisniewski, J. P., Currie, T., et al.: *Multi-epoch Direct Imaging and Time-variable Scattered Light Morphology of the HD 163296 Protoplanetary Disk.* ApJ **875**, 38 (2019)

Rodríguez-Muñoz, L., Rodighiero, G., Mancini, C., et al.: *Quantifying the suppression of the (un)-obscured star formation in galaxy cluster cores at $0.2 \lesssim z \lesssim 0.9$.* MNRAS **485**, 586 (2019)

Rohde, P. F., Walch, S., Seifried, D., et al.: *Evolution of Hubble wedges in episodic protostellar outflows.* MNRAS **483**, 2563 (2019)

Sabiu, C. G., Hoyle, B., Kim, J., et al.: *Graph Database Solution for Higher-order Spatial Statistics in the Era of Big Data.* ApJS **242**, 29 (2019)

Samuroff, S., Blazek, J., Troxel, M. A., et al.: *Dark Energy Survey Year 1 results: constraints on intrinsic alignments and their colour dependence from galaxy clustering and weak lensing.* MNRAS **489**, 5453 (2019)

Sevilla-Noarbe, I., Hoyle, B., Marchã, M. J., et al.: *Star-galaxy classification in the Dark Energy Survey Y1 data set.* MNRAS **481**, 5451 (2018)

Shajib, A. J., Birrer, S., Treu, T., et al.: *Is every strong lens model unhappy in its own way? Uniform modelling of a sample of 13 quadruply+ imaged quasars.* MNRAS **483**, 5649 (2019)

Shin, T., Adhikari, S., Baxter, E. J., et al.: *Measurement of the splashback feature around SZ-selected Galaxy clusters with DES, SPT, and ACT.* MNRAS **487**, 2900 (2019)

Simon, P., Saghiha, H., Hilbert, S., et al.: *Comparison of the excess mass around CFHTLenS galaxy-pairs to predictions from a semi-analytic model using galaxy-galaxy-galaxy lensing.* A&A **622**, A104 (2019)

Soares-Santos, M., Palmese, A., Hartley, W., et al.: *First Measurement of the Hubble Constant from a Dark Standard Siren using the Dark Energy Survey Galaxies and the LIGO/Virgo Binary-Black-hole Merger GW170814.* ApJ **876**, L7 (2019)

Stammler, S. M., Drazkowska, J., Birnstiel, T., et al.: *The DSHARP Rings: Evidence of Ongoing Planetesimal Formation?* ApJ **884**, L5 (2019)

Steinwandel, U. P., Beck, M. C., Arth, A., et al.: *Magnetic buoyancy in simulated galactic discs with a realistic circumgalactic medium.* MNRAS **483**, 1008 (2019)

Stern, C., Dietrich, J. P., Bocquet, S., et al.: *Weak-lensing analysis of SPT-selected galaxy clusters using Dark Energy Survey Science Verification data.* MNRAS **485**, 69 (2019)

Strazzullo, V., Pannella, M., Mohr, J. J., et al.: *Galaxy populations in the most distant SPT-SZ clusters. I. Environmental quenching in massive clusters at 1.4* $\lesssim z \lesssim$ *1.7.* A&A **622**, A117 (2019)

Stringer, K. M., Long, J. P., Macri, L. M., et al.: *Identification of RR Lyrae Stars in Multiband, Sparsely Sampled Data from the Dark Energy Survey Using Template Fitting and Random Forest Classification.* AJ **158**, 16 (2019)

Teague, R., Bae, J., Birnstiel, T., et al.: *Evidence for a Vertical Dependence on the Pressure Structure in AS 209.* ApJ **868**, 113 (2018)

Temple, M. J., Banerji, M., Hewett, P. C., et al.: *[O III] Emission line properties in a new sample of heavily reddened quasars at* $z > 2$. MNRAS **487**, 2594 (2019)

Torrealba, G., Belokurov, V., Koposov, S. E., et al.: *The hidden giant: discovery of an enormous Galactic dwarf satellite in Gaia DR2.* MNRAS **488**, 2743 (2019)

Ubeira Gabellini, M. G., Miotello, A., Facchini, S., et al.: *A dust and gas cavity in the disc around CQ Tau revealed by ALMA.* MNRAS **486**, 4638 (2019)

Übler, H., Genzel, R., Wisnioski, E., et al.: *The Evolution and Origin of Ionized Gas Velocity Dispersion from* $z \sim 2.6$ *to* $z \sim 0.6$ *with KMOS*^{3D}. ApJ **880**, 48 (2019)

Unruh, S., Schneider, P., Hilbert, S.: *Magnification bias in the shear-ratio test: a viable mitigation strategy.* A&A **623**, A94 (2019)

Valentini, M., Murante, G., Borgani, S., et al.: *Impact of AGN feedback on galaxies and their multiphase ISM across cosmic time.* MNRAS2766 (2019)

van de Sande, J., Lagos, C. D. P., Welker, C., et al.: *The SAMI Galaxy Survey: comparing 3D spectroscopic observations with galaxies from cosmological hydrodynamical simulations.* MNRAS **484**, 869 (2019)

Varga, T. N., DeRose, J., Gruen, D., et al.: *Dark Energy Survey Year 1 results: validation of weak lensing cluster member contamination estimates from P(z) decomposition.* MNRAS **489**, 2511 (2019)

Wang, M. Y., Koposov, S., Drlica-Wagner, A., et al.: *Rediscovery of the Sixth Star Cluster in the Fornax Dwarf Spheroidal Galaxy.* ApJ **875**, L13 (2019)

Wang, Y., Pearce, F., Knebe, A., et al.: *The Three Hundred Project: The Influence of Environment on Simulated Galaxy Properties.* ApJ **868**, 130 (2018)

Weber, J. A., Pauldrach, A. W. A., Hoffmann, T. L.: *Numerical models for the diffuse ionized gas in galaxies. II. Three-dimensional radiative transfer in inhomogeneous interstellar structures as a tool for analyzing the diffuse ionized gas.* A&A **622**, A115 (2019)

Wong, K. C., Moriya, T. J., Oguri, M., et al.: *Searches for Population III pair-instability supernovae: Impact of gravitational lensing magnification.* PASJ **71**, 60 (2019)

Zabel, N., Davis, T. A., Smith, M. W. L., et al.: *The ALMA Fornax Cluster Survey I: stirring and stripping of the molecular gas in cluster galaxies.* MNRAS **483**, 2251 (2019)

Zanella, A., Daddi, E., Magdis, G., et al.: *The [C II] emission as a molecular gas mass tracer in galaxies at low and high redshifts.* MNRAS **481**, 1976 (2018)

Zanella, A., Le Floc'h, E., Harrison, C. M., et al.: *A contribution of star-forming clumps and accreting satellites to the mass assembly of z 2 galaxies.* MNRAS **489**, 2792 (2019)

Zhang, C.-P., Csengeri, T., Wyrowski, F., et al.: *Probing the initial conditions of high-mass star formation. III. Fragmentation and triggered star formation.* A&A **627**, A85 (2019)

Zhang, S., Zhu, Z., Huang, J., et al.: *The Disk Substructures at High Angular Resolution Project (DSHARP). VII. The Planet-Disk Interactions Interpretation.* ApJ **869**, L47 (2018)

Zhang, Y., Jeltema, T., Hollowood, D. L., et al.: *Dark Energy Surveyed Year 1 results: calibration of cluster mis-centring in the redMaPPer catalogues.* MNRAS **487**, 2578 (2019)

Zhang, Y., Miller, C. J., Rooney, P., et al.: *Galaxies in X-ray selected clusters and groups in Dark Energy Survey data – II. Hierarchical Bayesian modelling of the red-sequence galaxy luminosity function.* MNRAS **488**, 1 (2019)

Zhang, Y., Yanny, B., Palmese, A., et al.: *Dark Energy Survey Year 1 Results: Detection of Intracluster Light at Redshift 0.25.* ApJ **874**, 165 (2019)

Zhao, F., Zhao, G., Liu, Y., et al.: *Statistical modelling of an astro-comb for high-precision radial velocity observation.* MNRAS **482**, 1406 (2019)

Zhao, G.-B., Wang, Y., Saito, S., et al.: *The clustering of the SDSS-IV extended Baryon Oscillation Spectroscopic Survey DR14 quasar sample: a tomographic measurement of cosmic structure growth and expansion rate based on optimal redshift weights.* MNRAS **482**, 3497 (2019)

Zhu, Z., Zhang, S., Jiang, Y.-F., et al.: *One Solution to the Mass Budget Problem for Planet Formation: Optically Thick Disks with Dust Scattering.* ApJ **877**, L18 (2019)

Zohren, H., Schrabback, T., van der Burg, R. F. J., et al.: *Optical follow-up study of 32 high-redshift galaxy cluster candidates from Planck with the William Herschel Telescope.* MNRAS **488**, 2523 (2019)

5.2 Konferenzbeiträge

Andrews, S. M., Huang, J., Pérez, L. M., et al.: *ALMA Observations of the Epoch of Planet Formation.* The Messenger **174**, 19 (2018)

Bodendorf, C., Geis, N., Grupp, F., et al.: *Testing the near-infrared optical assembly of the space telescope Euclid.* In: *Proc. SPIE.* Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series **11116**, 111160Y (2019)

Cilibrasi, M., Szulagyi, J., Mayer, L., et al.: *Satellites Form Fast and Late: a Population Synthesis for the Galilean Moons.* In: *EPSC-DPS Joint Meeting 2019.* **2019**, EPSC (2019)

Civano, F., Cappelluti, N., Hickox, R., et al.: *Cosmic evolution of supermassive black holes: A view into the next two decades.* BAAS **51**, 429 (2019)

Drazkowska, J., Birnstiel, T., Stammler, S., et al.: *Dust growth in the vicinity of Jupiter-mass planet.* In: *EPSC-DPS Joint Meeting 2019.* **2019**, EPSC (2019)

Förster Schreiber, N. M., Wilman, D., Wisnioski, E. S., et al.: *Witnessing the Early Growth and Life Cycle of Galaxies with KMOS^{3D}.* The Messenger **174**, 28 (2018)

Gárate, M., Birnstiel, T., Drazkowska, J., et al.: *Dust back-reaction stops the gas accretion at the snowline.* In: AAS/Division for Extreme Solar Systems Abstracts **51**, 324.05 (2019)

Grupp, F., Kaminski, J., Bodendorf, C., et al.: *Euclid warm testing of the near-infrared optical assembly using a unique combination of CGH interferometry and tactile precision measurements.* In: *Proc. SPIE.* Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series **11116**, 1111618 (2019)

Leutenegger, M., Corcoran, M., David-Uraz, A., et al.: *The crucial role of high resolution X-ray spectroscopy in studies of massive stars and their winds.* BAAS **51**, 512 (2019)

Maio, U., Borgani, S., Ciardi, B., et al.: *The seeds of supermassive black holes and the role of local radiation and metal spreading.* PASA **36**, e020 (2019)

van der Marel, N., Dong, R., Matthews, B., et al.: *Dust growth and dust trapping in protoplanetary disks with the ngVLA.* BAAS **51**, 451 (2019)

van der Marel, N., Matthews, B., Dong, R., et al.: *Dust Growth and Dust Trapping in Protoplanetary Disks.* In: Murphy, E. (ed.): *Science with a Next Generation Very Large Array*, ASP Conference Series, Vol. 517, p. 199 (2018)

Zormpas, A., Birnstiel, T., Rosotti, G.: *Disk Population Synthesis.* In: AAS/Division for Extreme Solar Systems Abstracts **51**, 324.01 (2019)

Prof. Dr. A.W.A. Pauldrach