

München

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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], Lehrstuhlvertretung Prof. Dr. W. Dehnen [-6035], PD Dr. Dr.habil. K. Dolag [-5994], Prof. Dr. B. Ercolano [-6974], 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. A. Arth [-5847], Dr. C. Alig [-6966], Dr. H. Barwig [-5974], Dr. A. Beifiori [-6017], Dr. S. Bocquet [-6034], Dr. J. Chan (MPE), De. G. Chon (EXC)[-6964], Dr. J. Dietrich [-5942], Dr. J. Drazkowska (ERC)[-9294], Dr. P. Erwin (MPE), Dr. M. Fabricius (MPE), Dr. D. Farrow (MPE), Dr. M. Fossati (MPE), Dr. R. Gabler [-6019], Dr. A. Galametz (MPE), Dr. C. Gössl [-5972], Dr. M. Goto-Egner [-6949](DFG), Dr. T. Grassi [-9279], Dr. M. Gritschneider [-6986](DFG), Dr. F. Grupp [-6005], Dr. R. Häfner [-6012], Dr. N. Hamaus [-9294], Dr. T. Hoffmann [-6024], Dr. D. Hubber [-9279](Konwihl-IV), Dr. U. Hopp [-5997], Dr. B. Hoyle [-5989](MPE), Dr. H. Israel [-6949], Dr. M. Klein [-6006], Dr. M. Kümmel [-5993], Dr. N. Maddox [-6949], Dr. X. Mazzalay (MPE), Dr. J. T. Mendel (MPE), Dr. M. Mirkazemi, Dr. A. Monna [-5983](BMBF), Dr. C. Obermeier [-5995](MPE), Dr. A. Obreja [-5918], Dr. K. Paech [-5895](EXC), Dr. M. Pannella [-6006], Dr. M. Petkova, Dr. G. Picogna [-6973](EXC), Dr. G. Pollina [-5987], Dr. R. Remus [-6986], Dr. B. Riaz [-6002](DFG), Dr. A. Riffeser [-5973], Dr. A. Sanchez (MPE), Dr. M. Schartmann (DFG)[-5994], Dr. S. Seitz

[-5996], Dr. J. Snigula [-6027](MPE), Dr. S. Stammmler [-9298](ERC), Dr. L. Steinborn [-6968](EXC), Dr. V. Strazzullo [-6033], Dr. J. Thomas (MPE), MSci T. Vassallo [-5918], Dr. M. Vignola (MPE), Dr. L. Wang [-5983](MPE), Dr. J. Weber[-6030](DFG), Dr. D. Wilman [-5998](DFG)

Doktoranden:

Dipl.-Phys. M. Behrendt (GIF), MSci R. Capasso [-6029], MSci L.P. Carneiro [-6029], MSci V. Fahrnschon [-5983](MPE), MSci S. Flaischlen [-5991](DFG), MSci R. Franz [-5970](DFG), MSci O. Friedrich [-5978], MSci M. Garate [-6029](ERC), MSci S. Grandis [-6029], MSci N. Gupta [-6029], MSci M. Häuser [-5846](BMBF), MSci S. Heigl [-6031](MPE), MSci L. Hennicker [-6004](DFG), MSci J. Hou (MPE), MSci H. Kellermann [-5983](MPE), MSci M. Kluge [-5981](MPE), MSci M. Kodric [-6975], MSci J. O' Leary [-5990](DFG), MSci M. Lippich-Golobart (MPE), MSci M. Lotz [-5847](EXC), MSci P. Lustig [-6023], MSci K. Monsch [-5847](DFG), MSci B. Neureither (MPE), MSci M. Paulus [-6029], MSci A. Ragagnin [-6029], MSci R. Rehmann [-5978](EXC), MSci F. Schulze [-5990](MPE), MSci M. Smolla [-6029](DFG), MSci L. Steinborn [-6968](TR33), MSci U. Steinwandel [-5990](DFG), MSci A. Teklu [-6968](EXC), MSci T. Varga [-5981](MPE), MSci A. Zormpas [-6029](TR96)

Diplomanden und Masteranden:

J. Bach [-5977], J. Diehl [-5979], A. Djamali [-5979], B. Ferrer [-5977], P. Förster [-5982], D. Frei [-5982], A. Halder [-5978], A. Hoffmann [-5981], S. Krampf [-5978], Y. Liu [-5982], B. Mayr [-5991], K. Mehrgan (MPE), V. Nistane [-5981], G. Pentaris (MPE), E. SEXTL [-5979], J. Steuer [-5982], S. Tian [-5981], F. Turan [-6966], A. Tzelepidis [-5981], M. Weiler [-5981], C.v. Wedemeyer [-5981], O. Zier [-5991]

Technisches Personal und Softwareentwickler:

Dipl.-Phys. A. Bohnet (MPE), M. Gillhuber (MPE), Dipl.-Ing.(FH) H.J. Hess [-6010], MSci. M. Häuser [5846] (BMBF), M. Schuster [-5986], Dipl.-Ing.(FH) H. Kravcar [-5971] (BMBF), Dipl. Phys F. Lang-Bardl [-6965], Dipl.-Phys. J. Richter [-6013] (BMBF), Dr. J. Schlichter [-6011] (BMBF), L. Schneiders-Fesl [-6025], M. Siedschlag [-5970], Dipl.-Phys. M. Wegner [-6020] (BMBF), P. Well [-5988]

Sekretariat und Verwaltung:

N. Auer [-6095], S. Grötsch [-6001], U. Le Guay [-6000], G. Niggel [-5869]

Observatorium Wendelstein [Tel: 08023-]:

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

1.2 Personelle Veränderungen

Ausgeschieden:

F. Beaujean (31.05.2018), L.P. Carneiro (31.10.2018) M. Costanzi (15.10.2018), T. Gianantonio (28.02.2018), N. Gupta (31.01.2018) S. Hagstotz (30.06.2018), A. Karasz (12.02.2018), M. Kodric (30.11.2018), G.-X. Li (31.08.2018), C. Liu (31.08.2018), T. Tutis (30.10.2018)

Neueinstellungen und Änderungen des Anstellungsverhältnisses:

H. Boehringer (01.08.2018), G. Chon (01.06.2018), W. Dehnen (01.10.2018), J. Drazkowska (01.06.2018), P. Lustig (17.09.2018), N. Maddox (01.09.2018), B. Neureither (01.10.2018), J. O Leary (01.03.2018), B. Riaz (01.09.2018), M. Schuster (01.09.2018), M. Smolla (01.08.2018), A. Zormpas (01.04.2018)

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. T. Giannantonio, 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

34 Naturwissenschaftliche Vorprüfungen in Zahnmedizin,

32 Bachelorprüfungen in Physik,

72 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, 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, J. Dietrich, M. Klein)

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)
- Numerische Simulationen zur Entstehung und Entwicklung von Galaxien, Galaxiengruppen und -haufen und Strukturbildung. (A. Burkert, K. Dolag, J. Weller, S. Bocquet)

3.3 Sterne und Planeten

- Suche nach extrasolaren Planeten. (R. Bender, R.P. Saglia, A. Riffeser)
- 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 (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:

- Bach, Simon: Redshift Space Distortions and Cosmic Voids. München, USM, Masterarbeit, 2018
- Batziou, Eirini: The Interplay of Magnetic Fields and Star Formation Processes Using SPMHD Simulations. München, USM, Masterarbeit, 2018
- Bittner, Adrian: Spiral Galaxies in Cosmological Zoom-Simulations. München, USM, Masterarbeit, 2018
- Frei, Dennis: Stellar and Wind Parameters of B-Supergiants in the Small Magellanic Cloud, and Wind-Momentum Luminosity Relation. München, USM, Masterarbeit, 2018
- Furtak, Lukas: Strong gravitational lensing analysis of PLCK G287.0+32.9. München, USM, Masterarbeit, 2018

- Geray, Karademir: Simulated Galaxy Interactions In Cosmological and Idealized Environments. München, USM, Masterarbeit, 2018
- Hochstetter, Fabian: Test and implementation of a guiding camera for FOCES at the 2m Wendelstein telescope. München, USM, Masterarbeit, 2018
- Lingg, Jakob: Photometric Redshift Estimation and Testing of Chromatic Correction Mapping for Euclid. München, USM, Masterarbeit, 2018
- Mehrgan, Kianusch: The faint center of Holm15A - The dynamical fingerprints of the largest supermassive black hole known so far? München, USM, Masterarbeit, 2018
- Neureiter, Bianca: The distribution and dynamics of stars in early-type galaxies. München, USM, Masterarbeit, 2018
- Nistane, Viraj: CMB Angular Power Spectrum for an Off-center Observer in a Large-Scale Void Model, München, USM, Masterarbeit, 2018
- Puchert, Patrick: Photometric Redshift Estimation, Spectroscopic Redshift Estimation And Prediction of Artificial Spectra with Machine Learning. München, USM, Masterarbeit, 2018
- Schuster, Nico: Influence of Massive Neutrinos on Cosmic Voids. München, USM, Masterarbeit, 2018
- Tzelepidis, Alexandros: Evolution of Galaxy Populations in SZ Selected Galaxy Clusters to $z=1$. München, USM, Masterarbeit, 2018
- Wölfer, Lisa: Thermal and Hydrodynamical Simulations of X-ray photoevaporation in metal depleted circumstellar discs. München, USM, Masterarbeit, 2018
- Wolf, Julien Anton: Generating Volumetric Representations of the Dark Matter Halo Distribution using Deep Machine Learning. München, USM, Masterarbeit, 2018

4.2 Dissertationen

Abgeschlossen:

- Carneiro, Luiz Paulo: Atmospheric NLTE-Models for the Spectroscopic Analysis of massive stars: New methods and first results for deriving CNO surface abundances. München, USM, Dissertation, 2018
- Cikota, Aleksandar: Narrowing down supernova progenitors with (spectro)polarimetry. München, USM, Dissertation, 2018
- Finozzi, Fabrizio: Triaxial Models of massive elliptical galaxies. München, USM, Dissertation, 2018
- Friedrich, Oliver: Weak-Lensing: Density split statistics. München, USM, Dissertation, 2018
- Gupta, Nikhel: High Frequency Cluster Radio Galaxies and the Sunyaev-Zel'dovich Effect Properties of Galaxy Clusters. München, USM, Dissertation, 2018.
- Hagstotz, Steffen: Large-Scale Structure Probes of Accelerated Expansion. München, USM, Dissertation, 2018
- Pollina, Giorgia: Cosmic Voids in Large-Scale Structure Surveys. München, USM, Dissertation, 2018
- Ragagnin, Antonio: From the mass-concentration relation of haloes to GPUs and into the web: A guide on fully utilizing super computers for the largest, cosmological hydrodynamic simulations. München, USM, Dissertation, 2018
- Steinborn, Lisa: Modelling active galactic nuclei in cosmological simulations: how sub-grid models help to reveal the driving mechanisms of nuclear activity. München, USM, Dissertation, 2018
- Teklu, Adelheid: A Dress Code for Galaxies: How the Interplay of Gas, Stars, Dark Matter and Environment shapes their appearance in Simulations. München, USM, Dissertation, 2018
- Weber, Johann: Three-dimensional, time-dependent Radiative Transfer for H II Regions, the Diffuse Ionized Gas, and the Reionization of the Universe. München, USM, Dissertation, 2018

5 Veröffentlichungen

5.1 In Zeitschriften und Büchern

- Abbott, T. M. C., Abdalla, F. B., Alarcon, A., et al.: *Dark Energy Survey year 1 results: Cosmological constraints from galaxy clustering and weak lensing*. Phys. Rev. D **98**, 043526 (2018)
- Abbott, T. M. C., Abdalla, F. B., Annis, J., et al.: *Dark Energy Survey Year 1 Results: A Precise H_0 Estimate from DES Y1, BAO, and D/H Data*. MNRAS **480**, 3879 (2018)
- Abolfathi, B., Aguado, D. S., Aguilar, G., et al.: *The Fourteenth Data Release of the Sloan Digital Sky Survey: First Spectroscopic Data from the Extended Baryon Oscillation Spectroscopic Survey and from the Second Phase of the Apache Point Observatory Galactic Evolution Experiment*. ApJS **235**, 42 (2018)
- Agnello, A., Lin, H., Buckley-Geer, L., et al.: *Models of the strongly lensed quasar DES J0408-5354*. MNRAS **472**, 4038 (2017)
- Arrigoni Battaia, F., Prochaska, J. X., Hennawi, J. F., et al.: *Inspiraling halo accretion mapped in Ly α emission around a $z \sim 3$ quasar*. MNRAS **473**, 3907 (2018)
- Assef, R. J., Prieto, J. L., Stern, D., et al.: *A Luminous Transient Event in a Sample of WISE-selected Variable AGNs*. ApJ **866**, 26 (2018)
- Astropy Collaboration, Price-Whelan, A. M., Sipőcz, B. M., et al.: *The Astropy Project: Building an Open-science Project and Status of the v2.0 Core Package*. AJ **156**, 123 (2018)
- Avila, S., Crocce, M., Ross, A. J., et al.: *Dark Energy Survey Year-1 results: galaxy mock catalogues for BAO*. MNRAS **479**, 94 (2018)
- Bae, J., Pinilla, P., Birnstiel, T.: *Diverse Protoplanetary Disk Morphology Produced by a Jupiter-mass Planet*. ApJ **864**, L26 (2018)
- Balestra, I., Vanzella, E., Rosati, P., et al.: *CLASH-VLT: spectroscopic confirmation of a $z = 6.11$ quintuply lensed galaxy in the Frontier Fields Cluster RXC J2248.7-4431 (Corrigendum)*. A&A **611**, C2 (2018)
- Ballone, A., Schartmann, M., Burkert, A., et al.: *3D AMR hydrosimulations of a compact-source scenario for the Galactic Centre cloud G2*. MNRAS **479**, 5288 (2018)
- Baxter, E. J., Raghunathan, S., Crawford, T. M., et al.: *A measurement of CMB cluster lensing with SPT and DES year 1 data*. MNRAS **476**, 2674 (2018)
- Bellstedt, S., Forbes, D. A., Romanowsky, A. J., et al.: *Erratum: The SLUGGS Survey: a comparison of total-mass profiles of early-type galaxies from observations and cosmological simulations, to ~ 4 effective radii*. MNRAS **478**, 1925 (2018)
- Bellstedt, S., Forbes, D. A., Romanowsky, A. J., et al.: *The SLUGGS survey: a comparison of total-mass profiles of early-type galaxies from observations and cosmological simulations, to ~ 4 effective radii*. MNRAS **476**, 4543 (2018)
- Berger, T. A., Kudritzki, R.-P., Urbaneja, M. A., et al.: *Quantitative Spectroscopy of Supergiants in the Local Group Dwarf Galaxy IC 1613: Metallicity and Distance*. ApJ **860**, 130 (2018)
- 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)

- 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)
- 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 (2018)
- Böhm, V., Hilbert, S., Greiner, M., et al.: *Bayesian weak lensing tomography: Reconstructing the 3D large-scale distribution of matter with a lognormal prior*. Phys. Rev. D **96**, 123510 (2017)
- Bonamigo, M., Grillo, C., Ettori, S., et al.: *Dissection of the Collisional and Collisionless Mass Components in a Mini Sample of CLASH and HFF Massive Galaxy Clusters at $z \sim 0.4$* . ApJ **864**, 98 (2018)
- Boselli, A., Fossati, M., Cuillandre, J. C., et al.: *A Virgo Environmental Survey Tracing Ionised Gas Emission (VESTIGE). III. Star formation in the stripped gas of NGC 4254*. A&A **615**, A114 (2018)
- Boselli, A., Fossati, M., Ferrarese, L., et al.: *A Virgo Environmental Survey Tracing Ionised Gas Emission (VESTIGE). I. Introduction to the survey*. A&A **614**, A56 (2018)
- 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 (2018)
- Buck, T., Ness, M. K., Macciò, A. V., et al.: *Stars Behind Bars. I. The Milky Way’s Central Stellar Populations*. ApJ **861**, 88 (2018)
- Burigana, C., Carvalho, C. S., Trombetti, T., et al.: *Exploring cosmic origins with CORE: Effects of observer peculiar motion*. J. Cosmology Astropart. Phys. **4**, 021 (2018)
- Calderón, D., Cuadra, J., Schartmann, M., et al.: *The Galactic Centre source G2 was unlikely born in any of the known massive binaries*. MNRAS **478**, 3494 (2018)
- 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)
- Capelo, P. R., Bovino, S., Lupi, A., et al.: *The effect of non-equilibrium metal cooling on the interstellar medium*. MNRAS **475**, 3283 (2018)
- Carneiro, L. P., Puls, J., Hoffmann, T. L.: *Carbon line formation and spectroscopy in O-type stars*. A&A **615**, A4 (2018)
- Castignani, G., Combes, F., Salomé, P., et al.: *Molecular gas in two companion cluster galaxies at $z = 1.2$* . A&A **617**, A103 (2018)
- Castro, T., Quartin, M., Giocoli, C., et al.: *The effect of baryons in the cosmological lensing PDFs*. MNRAS **478**, 1305 (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)
- Challinor, A., Allison, R., Carron, J., et al.: *Exploring cosmic origins with CORE: Gravitational lensing of the CMB*. J. Cosmology Astropart. Phys. **4**, 018 (2018)
- Chan, J. C. C., Beifiori, A., Saglia, R. P., et al.: *The KMOS Cluster Survey (KCS). II. The Effect of Environment on the Structural Properties of Massive Cluster Galaxies at Redshift $1.39 < z < 1.61$* . ApJ **856**, 8 (2018)

- Chan, K. C., Crocce, M., Ross, A. J., et al.: *BAO from angular clustering: optimization and mitigation of theoretical systematics*. MNRAS **480**, 3031 (2018)
- Chang, C., Baxter, E., Jain, B., et al.: *The Splashback Feature around DES Galaxy Clusters: Galaxy Density and Weak Lensing Profiles*. ApJ **864**, 83 (2018)
- Chang, C., Pujol, A., Mawdsley, B., et al.: *Dark Energy Survey Year 1 results: curved-sky weak lensing mass map*. MNRAS **475**, 3165 (2018)
- Chirivì, G., Suyu, S. H., Grillo, C., et al.: *MACS J0416.1-2403: Impact of line-of-sight structures on strong gravitational lensing modelling of galaxy clusters*. A&A **614**, A8 (2018)
- Chiu, I., Mohr, J. J., McDonald, M., et al.: *Baryon content in a sample of 91 galaxy clusters selected by the South Pole Telescope at $0.2 < z < 1.25$* . MNRAS **478**, 3072 (2018)
- Choksi, N., Behroozi, P., Volonteri, M., et al.: *Recoiling supermassive black hole escape velocities from dark matter haloes*. MNRAS **472**, 1526 (2017)
- Chown, R., Omori, Y., Aylor, K., et al.: *Maps of the Southern Millimeter-wave Sky from Combined 2500 deg² SPT-SZ and Planck Temperature Data*. ApJS **239**, 10 (2018)
- Cilibrasi, M., Szulágyi, J., Mayer, L., et al.: *Satellites form fast and late: a population synthesis for the Galilean moons*. MNRAS **480**, 4355 (2018)
- Coccatto, L., Fabricius, M. H., Saglia, R. P., et al.: *Spectroscopic decomposition of NGC 3521: unveiling the properties of the bulge and disc*. MNRAS **477**, 1958 (2018)
- Colavincenzo, M., Sefusatti, E., Monaco, P., et al.: *Comparing approximate methods for mock catalogues and covariance matrices III: Bispectrum*. MNRAS (2018)
- Coogan, R. T., Daddi, E., Sargent, M. T., et al.: *Merger-driven star formation activity in Cl J1449+0856 at $z = 1.99$ as seen by ALMA and JVLA*. MNRAS **479**, 703 (2018)
- Costanzi, M., Rozo, E., Rykoff, E. S., et al.: *Modelling projection effects in optically selected cluster catalogues*. MNRAS **482**, 490 (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)
- Cui, W., Knebe, A., Yepes, G., et al.: *The Three Hundred project: a large catalogue of theoretically modelled galaxy clusters for cosmological and astrophysical applications*. MNRAS **480**, 2898 (2018)
- Davis, C., Rozo, E., Roodman, A., et al.: *Cross-correlation redshift calibration without spectroscopic calibration samples in DES Science Verification Data*. MNRAS **477**, 2196 (2018)
- de Bernardis, P., Ade, P. A. R., Baselmans, J. J. A., et al.: *Exploring cosmic origins with CORE: The instrument*. J. Cosmology Astropart. Phys. **4**, 015 (2018)
- De Boni, C., Böhringer, H., Chon, G., et al.: *Evolution of the degree of substructures in simulated galaxy clusters*. MNRAS **478**, 2086 (2018)
- De Zotti, G., González-Nuevo, J., Lopez-Caniego, M., et al.: *Exploring cosmic origins with CORE: Extragalactic sources in cosmic microwave background maps*. J. Cosmology Astropart. Phys. **4**, 020 (2018)
- Delabrouille, J., de Bernardis, P., Bouchet, F. R., et al.: *Exploring cosmic origins with CORE: Survey requirements and mission design*. J. Cosmology Astropart. Phys. **4**, 014 (2018)

- Di Teodoro, E. M., Grillo, C., Fraternali, F., et al.: *Kinematics of the SN Refsdal host revealed by MUSE: a regularly rotating spiral galaxy at $z \simeq 1.5$* . MNRAS **476**, 804 (2018)
- Di Valentino, E., Brinckmann, T., Gerbino, M., et al.: *Exploring cosmic origins with CORE: Cosmological parameters*. J. Cosmology Astropart. Phys. **4**, 017 (2018)
- Drażkowska, J., Szulágyi, J.: *Dust Evolution and Satellitesimal Formation in Circumplanetary Disks*. ApJ **866**, 142 (2018)
- Drlica-Wagner, A., Sevilla-Noarbe, I., Rykoff, E. S., et al.: *Dark Energy Survey Year 1 Results: The Photometric Data Set for Cosmology*. ApJS **235**, 33 (2018)
- Dutton, A. A., Obreja, A., Macciò, A. V.: *NIHAO XVII: The diversity of dwarf galaxy kinematics and implications for the HI velocity function*. MNRAS (2018)
- Elbaz, D., Leiton, R., Nagar, N., et al.: *Starbursts in and out of the star-formation main sequence*. A&A **616**, A110 (2018)
- Elvin-Poole, J., Crocce, M., Ross, A. J., et al.: *Dark Energy Survey year 1 results: Galaxy clustering for combined probes*. Phys. Rev. D **98**, 042006 (2018)
- Ercolano, B., Jennings, J., Rosotti, G., et al.: *X-ray photoevaporation's limited success in the formation of planetesimals by the streaming instability*. MNRAS **472**, 4117 (2017)
- Ercolano, B., Weber, M. L., Owen, J. E.: *Accreting transition discs with large cavities created by X-ray photoevaporation in C and O depleted discs*. MNRAS **473**, L64 (2018)
- Erwin, P.: *The dependence of bar frequency on galaxy mass, colour, and gas content – and angular resolution – in the local universe*. MNRAS **474**, 5372 (2018)
- Erwin, P., Thomas, J., Saglia, R. P., et al.: *NGC 307 and the effects of dark-matter haloes on measuring supermassive black holes in disc galaxies*. MNRAS **473**, 2251 (2018)
- Finner, K., Jee, M. J., Golovich, N., et al.: *MC²: Subaru and Hubble Space Telescope Weak-lensing Analysis of the Double Radio Relic Galaxy Cluster PLCK G287.0+32.9*. ApJ **851**, 46 (2017)
- Forbes, D. A., Remus, R.-S.: *Metallicity gradients in the globular cluster systems of early-type galaxies: in situ and accreted components?* MNRAS **479**, 4760 (2018)
- Förster Schreiber, N. M., Renzini, A., Mancini, C., et al.: *The SINS/zC-SINF Survey of $z \simeq 2$ Galaxy Kinematics: SINFONI Adaptive Optics – assisted Data and Kiloparsec-scale Emission-line Properties*. ApJS **238**, 21 (2018)
- Fossati, M., Mendel, J. T., Boselli, A., et al.: *A Virgo Environmental Survey Tracing Ionised Gas Emission (VESTIGE). II. Constraining the quenching time in the stripped galaxy NGC 4330*. A&A **614**, A57 (2018)
- Franco, M., Elbaz, D., Béthermin, M., et al.: *GOODS-ALMA: 1.1 mm galaxy survey. I. Source catalog and optically dark galaxies*. A&A **620**, A152 (2018)
- Friedrich, O., Eifler, T.: *Precision matrix expansion – efficient use of numerical simulations in estimating errors on cosmological parameters*. MNRAS **473**, 4150 (2018)
- Friedrich, O., Gruen, D., DeRose, J., et al.: *Density split statistics: Joint model of counts and lensing in cells*. Phys. Rev. D **98**, 023508 (2018)
- Frings, J., Macciò, A., Buck, T., et al.: *The edge of galaxy formation – II. Evolution of Milky Way satellite analogues after infall*. MNRAS **472**, 3378 (2017)

- Gaczkowski, B., Roccatagliata, V., Flaischlen, S., et al.: *Squeezed between shells? The origin of the Lupus I molecular cloud. II. APEX CO and GASS H I observations.* A&A **608**, A102 (2017)
- Galametz, A., Pentericci, L., Castellano, M., et al.: *Growing up in a megalopolis: environmental effects on galaxy evolution in a supercluster at $z \sim 0.65$ in UKIDSS UDS.* MNRAS **475**, 4148 (2018)
- Garcia-Fernandez, M., Sanchez, E., Sevilla-Noarbe, I., et al.: *Weak lensing magnification in the Dark Energy Survey Science Verification data.* MNRAS **476**, 1071 (2018)
- Gatti, M., Vielzeuf, P., Davis, C., et al.: *Dark Energy Survey Year 1 results: cross-correlation redshifts – methods and systematics characterization.* MNRAS **477**, 1664 (2018)
- Giblin, B., Heymans, C., Harnois-Déraps, J., et al.: *KiDS-450: enhancing cosmic shear with clipping transformations.* MNRAS **480**, 5529 (2018)
- Ginski, C., Benisty, M., van Holstein, R. G., et al.: *First direct detection of a polarized companion outside a resolved circumbinary disk around CS Chamaeleonis.* A&A **616**, A79 (2018)
- Gobat, R., Daddi, E., Magdis, G., et al.: *The unexpectedly large dust and gas content of quiescent galaxies at $z < 1.4$.* Nature Astronomy **2**, 239 (2018)
- Goto, M., Bailey, J. D., Hocuk, S., et al.: *The first frost in the Pipe Nebula.* A&A **610**, A9 (2018)
- Grillo, C., Rosati, P., Suyu, S. H., et al.: *Measuring the Value of the Hubble Constant – à la Refsdal.* ApJ **860**, 94 (2018)
- Großschedl, J. E., Alves, J., Meingast, S., et al.: *3D shape of Orion A from Gaia DR2.* A&A **619**, A106 (2018)
- Gruen, D., Friedrich, O., Krause, E., et al.: *Density split statistics: Cosmological constraints from counts and lensing in cells in DES Y1 and SDSS data.* Phys. Rev. D **98**, 023507 (2018)
- Gschwend, J., Rossel, A. C., Ogando, R. L. C., et al.: *DES science portal: Computing photometric redshifts.* Astronomy and Computing **25**, 58 (2018)
- Günther, H. M., Birnstiel, T., Huenemoerder, D. P., et al.: *Optical Dimming of RW Aur Associated with an Iron-rich Corona and Exceptionally High Absorbing Column Density.* AJ **156**, 56 (2018)
- Heigl, S., Burkert, A., Gritschneider, M.: *Accretion-driven turbulence in filaments – I. Non-gravitational accretion.* MNRAS **474**, 4881 (2018)
- Heigl, S., Gritschneider, M., Burkert, A.: *Morphology of prestellar cores in pressure-confined filaments.* MNRAS **481**, L1 (2018)
- Heneka, C., Rapetti, D., Cataneo, M., et al.: *Cold dark energy constraints from the abundance of galaxy clusters.* MNRAS **473**, 3882 (2018)
- Hennicker, L., Puls, J., Kee, N. D., et al.: *3D radiative transfer: Continuum and line scattering in non-spherical winds from OB stars.* A&A **616**, A140 (2018)
- Ho, I.-T., Meidt, S. E., Kudritzki, R.-P., et al.: *Azimuthal variations of gas-phase oxygen abundance in NGC 2997.* A&A **618**, A64 (2018)

- Holgado, G., Simón-Díaz, S., Barbá, R. H., et al.: *The IACOB project. V. Spectroscopic parameters of the O-type stars in the modern grid of standards for spectral classification.* A&A **613**, A65 (2018)
- Hou, J., Sánchez, A. G., Scoccimarro, R., et al.: *The clustering of the SDSS-IV extended Baryon Oscillation Spectroscopic Survey DR14 quasar sample: anisotropic clustering analysis in configuration space.* MNRAS **480**, 2521 (2018)
- Hou, Z., Aylor, K., Benson, B. A., et al.: *A Comparison of Maps and Power Spectra Determined from South Pole Telescope and Planck Data.* ApJ **853**, 3 (2018)
- Hoyle, B., Gruen, D., Bernstein, G. M., et al.: *Dark Energy Survey Year 1 Results: redshift distributions of the weak-lensing source galaxies.* MNRAS **478**, 592 (2018)
- Hu, X., Tan, J. C., Zhu, Z., et al.: *Inside-out Planet Formation. IV. Pebble Evolution and Planet Formation Timescales.* ApJ **857**, 20 (2018)
- Huang, J., Andrews, S. M., Cleeves, L. I., et al.: *CO and Dust Properties in the TW Hya Disk from High-resolution ALMA Observations.* ApJ **852**, 122 (2018)
- Hubber, D. A., Rosotti, G. P., Booth, R. A.: *GANDALF – Graphical Astrophysics code for N-body Dynamics And Lagrangian Fluids.* MNRAS **473**, 1603 (2018)
- Ivlev, A. V., Burkert, A., Vasyunin, A., et al.: *Compact Dusty Clouds and Efficient H₂ Formation in Diffuse Interstellar Medium.* ApJ **861**, 30 (2018)
- Jeffrey, N., Abdalla, F. B., Lahav, O., et al.: *Improving weak lensing mass map reconstructions using Gaussian and sparsity priors: application to DES SV.* MNRAS **479**, 2871 (2018)
- Jennings, J., Ercolano, B., Rosotti, G. P.: *The comparative effect of FUV, EUV and X-ray disc photoevaporation on gas giant separations.* MNRAS **477**, 4131 (2018)
- Jiménez-Teja, Y., Dupke, R., Benítez, N., et al.: *Unveiling the Dynamical State of Massive Clusters through the ICL Fraction.* ApJ **857**, 79 (2018)
- Keppler, M., Benisty, M., Müller, A., et al.: *Discovery of a planetary-mass companion within the gap of the transition disk around PDS 70.* A&A **617**, A44 (2018)
- Killedar, M., Borgani, S., Fabjan, D., et al.: *Simulation-based marginal likelihood for cluster strong lensing cosmology.* MNRAS **473**, 1736 (2018)
- Klein, M., Mohr, J. J., Desai, S., et al.: *A multicomponent matched filter cluster confirmation tool for eROSITA: initial application to the RASS and DES-SV data sets.* MNRAS **474**, 3324 (2018)
- Kluska, J., Kraus, S., Davies, C. L., et al.: *A Multi-instrument and Multi-wavelength High Angular Resolution Study of MWC 614: Quantum Heated Particles Inside the Disk Cavity.* ApJ **855**, 44 (2018)
- Kodric, M., Riffeser, A., Hopp, U., et al.: *Cepheids in M31: The PAndromeda Cepheid Sample.* AJ **156**, 130 (2018)
- Kodric, M., Riffeser, A., Seitz, S., et al.: *M31 PAndromeda Cepheid Sample Observed in Four HST Bands.* ApJ **864**, 59 (2018)
- Krause, M. G. H., Burkert, A., Diehl, R., et al.: *Surround and Squash: the impact of superbubbles on the interstellar medium in Scorpius-Centaurus OB2.* A&A **619**, A120 (2018)

- Li, G.-X.: *Scale-free gravitational collapse as the origin of $\rho \sim r^{-2}$ density profile – a possible role of turbulence in regulating gravitational collapse*. MNRAS **477**, 4951 (2018)
- Li, G.-X., Burkert, A.: *Quantifying the interplay between gravity and magnetic field in molecular clouds – a possible multiscale energy equipartition in NGC 6334*. MNRAS **474**, 2167 (2018)
- Lin, M.-Y., Davies, R. I., Hicks, E. K. S., et al.: *LLAMA: nuclear stellar properties of Swift-BAT AGN and matched inactive galaxies*. MNRAS **473**, 4582 (2018)
- 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)
- Liu, D., Daddi, E., Dickinson, M., et al.: *Super-deblended Dust Emission in Galaxies. I. The GOODS-North Catalog and the Cosmic Star Formation Rate Density out to Redshift 6*. ApJ **853**, 172 (2018)
- Macciò, A. V., Frings, J., Buck, T., et al.: *The edge of galaxy formation – I. Formation and evolution of MW-satellite analogues before accretion*. MNRAS **472**, 2356 (2017)
- MacCrann, N., DeRose, J., Wechsler, R. H., et al.: *DES Y1 Results: validating cosmological parameter estimation using simulated Dark Energy Surveys*. MNRAS **480**, 4614 (2018)
- Markova, N., Puls, J., Langer, N.: *Spectroscopic and physical parameters of Galactic O-type stars. III. Mass discrepancy and rotational mixing*. A&A **613**, A12 (2018)
- Martinet, N., Schneider, P., Hildebrandt, H., et al.: *KiDS-450: cosmological constraints from weak-lensing peak statistics – II: Inference from shear peaks using N-body simulations*. MNRAS **474**, 712 (2018)
- Mashonkina, L., Jablonka, P., Sitnova, T., et al.: *The formation of the Milky Way halo and its dwarf satellites; a NLTE-1D abundance analysis. II. Early chemical enrichment*. A&A **608**, A89 (2017)
- Massey, R., Harvey, D., Liesenborgs, J., et al.: *Dark matter dynamics in Abell 3827: new data consistent with standard cold dark matter*. MNRAS **477**, 669 (2018)
- May, D., Rodríguez-Ardila, A., Prieto, M. A., et al.: *Powerful mechanical-driven outflows in the central parsecs of the low-luminosity active galactic nucleus ESO 428-G14*. MNRAS **481**, L105 (2018)
- 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)
- McLure, R. J., Pentericci, L., Cimatti, A., et al.: *The VANDELS ESO public spectroscopic survey*. MNRAS **479**, 25 (2018)
- Melin, J.-B., Bonaldi, A., Remazeilles, M., et al.: *Exploring cosmic origins with CORE: Cluster science*. J. Cosmology Astropart. Phys. **4**, 019 (2018)
- Mitsuishi, I., Babazaki, Y., Ota, N., et al.: *High entropy and evidence for a merger in the low surface brightness cluster Abell 2399*. PASJ (2018)
- Mizuki, T., Kuzuhara, M., Mede, K., et al.: *Orbital Characterization of GJ1108A System, and Comparison of Dynamical Mass with Model-derived Mass for Resolved Binaries*. ApJ **865**, 152 (2018)
- Monsch, K., Pineda, J. E., Liu, H. B., et al.: *Dense Gas Kinematics and a Narrow Filament in the Orion A OMC1 Region Using NH₃*. ApJ **861**, 77 (2018)

- Morganson, E., Gruendl, R. A., Menanteau, F., et al.: *The Dark Energy Survey Image Processing Pipeline*. PASP **130**, 074501 (2018)
- 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)
- Moster, B. P., Naab, T., White, S. D. M.: *EMERGE – an empirical model for the formation of galaxies since $z \sim 10$* . MNRAS **477**, 1822 (2018)
- Nagarajan, A., Pacaud, F., Sommer, M., et al.: *Weak-lensing mass calibration of the Sunyaev-Zel'dovich effect using APEX-SZ galaxy clusters*. MNRAS (2018)
- Natoli, P., Ashdown, M., Banerji, R., et al.: *Exploring cosmic origins with CORE: Mitigation of systematic effects*. J. Cosmology Astropart. Phys. **4**, 022 (2018)
- Obreja, A., Macciò, A. V., Moster, B., et al.: *Introducing galactic structure finder: the multiple stellar kinematic structures of a simulated Milky Way mass galaxy*. MNRAS **477**, 4915 (2018)
- Olave-Rojas, D., Cerulo, P., Demarco, R., et al.: *Galaxy pre-processing in substructures around $z \sim 0.4$ galaxy clusters*. MNRAS **479**, 2328 (2018)
- Opitsch, M., Fabricius, M. H., Saglia, R. P., et al.: *Evidence for non-axisymmetry in $M 31$ from wide-field kinematics of stars and gas*. A&A **611**, A38 (2018)
- Ortiz, J. L., Santos-Sanz, P., Sicardy, B., et al.: *The size, shape, density and ring of the dwarf planet Haumea from a stellar occultation*. Nature **550**, 219 (2017)
- Pentericci, L., McLure, R. J., Garilli, B., et al.: *The VANDELS ESO public spectroscopic survey: Observations and first data release*. A&A **616**, A174 (2018)
- Petrushevskaya, T., Goobar, A., Lagattuta, D. J., et al.: *Searching for supernovae in the multiply-imaged galaxies behind the gravitational telescope A370*. A&A **614**, A103 (2018)
- Picogna, G., Stoll, M. H. R., Kley, W.: *Particle accretion onto planets in discs with hydrodynamic turbulence*. A&A **616**, A116 (2018)
- Piras, D., Joachimi, B., Schäfer, B. M., et al.: *The mass dependence of dark matter halo alignments with large-scale structure*. MNRAS **474**, 1165 (2018)
- Pizzella, A., Morelli, L., Coccatto, L., et al.: *Evidence for the formation of the young counter-rotating stellar disk from gas acquired by IC 719*. A&A **616**, A22 (2018)
- Prat, J., Sánchez, C., Fang, Y., et al.: *Dark Energy Survey year 1 results: Galaxy-galaxy lensing*. Phys. Rev. D **98**, 042005 (2018)
- Prichard, L. J., Davies, R. L., Beifiori, A., et al.: *The KMOS Cluster Survey (KCS). III. Fundamental Plane of Cluster Galaxies at $z \simeq 1.80$ in JKCS 041*. ApJ **850**, 203 (2017)
- Proxauf, B., da Silva, R., Kovtyukh, V. V., et al.: *A new and homogeneous metallicity scale for Galactic classical Cepheids. I. Physical parameters*. A&A **616**, A82 (2018)
- Pulsoni, C., Gerhard, O., Arnaboldi, M., et al.: *The extended Planetary Nebula Spectrograph (ePN.S) early-type galaxy survey: The kinematic diversity of stellar halos and the relation between halo transition scale and stellar mass*. A&A **618**, A94 (2018)
- Reb, L., Fernández-Ontiveros, J. A., Prieto, M. A., et al.: *A lower limit to the accretion disc radius in the low-luminosity AGN NGC 1052 derived from high-angular resolution data*. MNRAS **478**, L122 (2018)

- Remazeilles, M., Banday, A. J., Baccigalupi, C., et al.: *Exploring cosmic origins with CORE: B-mode component separation*. J. Cosmology Astropart. Phys. **4**, 023 (2018)
- Renneby, M., Hilbert, S., Angulo, R. E.: *Halo mass and weak galaxy-galaxy lensing profiles in rescaled cosmological N-body simulations*. MNRAS **479**, 1100 (2018)
- Riaz, B., Thi, W.-F., Caselli, P.: *Chemical tracers in proto-brown dwarfs: CN, HCN, and HNC observations*. MNRAS **481**, 4662 (2018)
- Riaz, B., Thi, W.-F., Caselli, P.: *Chemical tracers in proto-brown dwarfs: CO, ortho-H₂CO, para-H₂CO, HCO⁺, CS observations*. MNRAS (2018)
- Rosario, D. J., Burtscher, L., Davies, R. I., et al.: *LLAMA: normal star formation efficiencies of molecular gas in the centres of luminous Seyfert galaxies*. MNRAS **473**, 5658 (2018)
- Rosotti, G. P., Dale, J. E., de Juan Ovelar, M., et al.: *Erratum: Protoplanetary disc evolution affected by star-disc interactions in young stellar clusters*. MNRAS **473**, 3223 (2018)
- Ross, A. J., Banik, N., Avila, S., et al.: *Optimized clustering estimators for BAO measurements accounting for significant redshift uncertainty*. MNRAS **472**, 4456 (2017)
- Saglia, R. P., Opitsch, M., Fabricius, M. H., et al.: *Stellar populations of the central region of M 31*. A&A **618**, A156 (2018)
- Sako, M., Bassett, B., Becker, A. C., et al.: *The Data Release of the Sloan Digital Sky Survey-II Supernova Survey*. PASP **130**, 064002 (2018)
- Schartmann, M., Burkert, A., Ballone, A.: *Simulating the pericentre passage of the Galactic centre star S2*. A&A **616**, L8 (2018)
- Schartmann, M., Mould, J., Wada, K., et al.: *The life cycle of starbursting circumnuclear gas discs*. MNRAS **473**, 953 (2018)
- Schneider, F. R. N., Sana, H., Evans, C. J., et al.: *An excess of massive stars in the local 30 Doradus starburst*. Science **359**, 69 (2018)
- Schrabback, T., Applegate, D., Dietrich, J. P., et al.: *Cluster mass calibration at high redshift: HST weak lensing analysis of 13 distant galaxy clusters from the South Pole Telescope Sunyaev-Zel'dovich Survey*. MNRAS **474**, 2635 (2018)
- Schreiber, C., Elbaz, D., Pannella, M., et al.: *Dust temperature and mid-to-total infrared color distributions for star-forming galaxies at $0 < z < 4$* . A&A **609**, A30 (2018)
- Schreiber, C., Labbé, I., Glazebrook, K., et al.: *Jekyll and Hyde: quiescence and extreme obscuration in a pair of massive galaxies 1.5 Gyr after the Big Bang*. A&A **611**, A22 (2018)
- Schulze, F., Remus, R.-S., Dolag, K., et al.: *Kinematics of simulated galaxies – I. Connecting dynamical and morphological properties of early-type galaxies at different redshifts*. MNRAS **480**, 4636 (2018)
- 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)
- Sevilla-Noarbe, I., Hoyle, B., Marchã, M. J., et al.: *Star-galaxy classification in the Dark Energy Survey Y1 dataset*. MNRAS (2018)

- Shan, H., Liu, X., Hildebrandt, H., et al.: *KiDS-450: cosmological constraints from weak lensing peak statistics – I. Inference from analytical prediction of high signal-to-noise ratio convergence peaks*. MNRAS **474**, 1116 (2018)
- Shipp, N., Drlica-Wagner, A., Balbinot, E., et al.: *Stellar Streams Discovered in the Dark Energy Survey*. ApJ **862**, 114 (2018)
- Simard, G., Omori, Y., Aylor, K., et al.: *Constraints on Cosmological Parameters from the Angular Power Spectrum of a Combined 2500 deg² SPT-SZ and Planck Gravitational Lensing Map*. ApJ **860**, 137 (2018)
- Simon, P., Hilbert, S.: *Scale dependence of galaxy biasing investigated by weak gravitational lensing: An assessment using semi-analytic galaxies and simulated lensing data*. A&A **613**, A15 (2018)
- Snodgrass, C., A’Hearn, M. F., Aceituno, F., et al.: *The 67P/Churyumov-Gerasimenko observation campaign in support of the Rosetta mission*. Philosophical Transactions of the Royal Society of London Series A **375**, 20160249 (2017)
- Soergel, B., Saro, A., Giannantonio, T., et al.: *Cosmology with the pairwise kinematic SZ effect: calibration and validation using hydrodynamical simulations*. MNRAS **478**, 5320 (2018)
- Steinborn, L. K., Hirschmann, M., Dolag, K., et al.: *Cosmological simulations of black hole growth II: how (in)significant are merger events for fuelling nuclear activity?* MNRAS **481**, 341 (2018)
- Steinwandel, U. P., Beck, M. C., Arth, A., et al.: *Magnetic buoyancy in simulated galactic discs with a realistic circum galactic medium*. MNRAS (2018)
- Strazzullo, V., Coogan, R. T., Daddi, E., et al.: *Deciphering the Activity and Quiescence of High-redshift Cluster Environments: ALMA Observations of Cl J1449+0856 at z = 2*. ApJ **862**, 64 (2018)
- Sundqvist, J. O., Owocki, S. P., Puls, J.: *2D wind clumping in hot, massive stars from hydrodynamical line-driven instability simulations using a pseudo-planar approach*. A&A **611**, A17 (2018)
- Sundqvist, J. O., Puls, J.: *Atmospheric NLTE models for the spectroscopic analysis of blue stars with winds. IV. Porosity in physical and velocity space*. A&A **619**, A59 (2018)
- Tacconi, L. J., Genzel, R., Saintonge, A., et al.: *PHIBSS: Unified Scaling Relations of Gas Depletion Time and Molecular Gas Fractions*. ApJ **853**, 179 (2018)
- Tchernin, C., Bartelmann, M., Huber, K., et al.: *Reconstruction of the two-dimensional gravitational potential of galaxy clusters from X-ray and Sunyaev-Zel’dovich measurements*. A&A **614**, A38 (2018)
- Teague, R., Bae, J., Bergin, E. A., et al.: *A Kinematical Detection of Two Embedded Jupiter-mass Planets in HD 163296*. ApJ **860**, L12 (2018)
- Teague, R., Henning, T., Guilloteau, S., et al.: *Temperature, Mass, and Turbulence: A Spatially Resolved Multiband Non-LTE Analysis of CS in TW Hya*. ApJ **864**, 133 (2018)
- Teklu, A. F., Remus, R.-S., Dolag, K., et al.: *Declining Rotation Curves at z = 2 in Λ CDM Galaxy Formation Simulations*. ApJ **854**, L28 (2018)
- Teklu, A. F., Remus, R.-S., Dolag, K., et al.: *The morphology-density relation: impact on the satellite fraction*. MNRAS **472**, 4769 (2017)

- Tihhonova, O., Courbin, F., Harvey, D., et al.: *H0LiCOW VIII. A weak-lensing measurement of the external convergence in the field of the lensed quasar HE 0435-1223*. MNRAS **477**, 5657 (2018)
- Tortorelli, L., Mercurio, A., Paolillo, M., et al.: *The Kormendy relation of galaxies in the Frontier Fields clusters: Abell S1063 and MACS J1149.5+2223*. MNRAS **477**, 648 (2018)
- Tripathi, A., Andrews, S. M., Birnstiel, T., et al.: *The Millimeter Continuum Size-Frequency Relationship in the UZ Tau E Disk*. ApJ **861**, 64 (2018)
- Troxel, M. A., Krause, E., Chang, C., et al.: *Survey geometry and the internal consistency of recent cosmic shear measurements*. MNRAS **479**, 4998 (2018)
- Troxel, M. A., MacCrann, N., Zuntz, J., et al.: *Dark Energy Survey Year 1 results: Cosmological constraints from cosmic shear*. Phys. Rev. D **98**, 043528 (2018)
- Truong, N., Rasia, E., Mazzotta, P., et al.: *Cosmological hydrodynamical simulations of galaxy clusters: X-ray scaling relations and their evolution*. MNRAS **474**, 4089 (2018)
- Umetsu, K., Sereno, M., Tam, S.-I., et al.: *The Projected Dark and Baryonic Ellipsoidal Structure of 20 CLASH Galaxy Clusters*. ApJ **860**, 104 (2018)
- Uyama, T., Hashimoto, J., Muto, T., et al.: *Subaru/HiCIAO HK_s Imaging of LKHa 330: Multi-band Detection of the Gap and Spiral-like Structures*. AJ **156**, 63 (2018)
- Valentino, F., Daddi, E., Silverman, J. D., et al.: *Predicting emission line fluxes and number counts of distant galaxies for cosmological surveys*. MNRAS **472**, 4878 (2017)
- van den Bosch, F. C., Ogiya, G., Hahn, O., et al.: *Disruption of dark matter substructure: fact or fiction?* MNRAS **474**, 3043 (2018)
- Vanzella, E., Nonino, M., Cupani, G., et al.: *Direct Lyman continuum and Ly α escape observed at redshift 4*. MNRAS **476**, L15 (2018)
- Vargas-Magaña, M., Ho, S., Cuesta, A. J., et al.: *The clustering of galaxies in the completed SDSS-III Baryon Oscillation Spectroscopic Survey: theoretical systematics and Baryon Acoustic Oscillations in the galaxy correlation function*. MNRAS **477**, 1153 (2018)
- Vazza, F., Brügggen, M., Hinz, P. M., et al.: *Probing the origin of extragalactic magnetic fields with Fast Radio Bursts*. MNRAS **480**, 3907 (2018)
- Vollmer, B., Schartmann, M., Burtscher, L., et al.: *Thick turbulent gas disks with magnetocentrifugal winds in active galactic nuclei. Model infrared emission and optical polarization*. A&A **615**, A164 (2018)
- Wang, T., Elbaz, D., Daddi, E., et al.: *Revealing the Environmental Dependence of Molecular Gas Content in a Distant X-Ray Cluster at $z = 2.51$* . ApJ **867**, L29 (2018)
- Wisnioski, E., Mendel, J. T., Förster Schreiber, N. M., et al.: *The KMOS^{3D} Survey: Rotating Compact Star-forming Galaxies and the Decomposition of Integrated Line Widths*. ApJ **855**, 97 (2018)
- Xie, L., De Lucia, G., Wilman, D. J., et al.: *On the influence of environment on star-forming galaxies*. MNRAS **480**, 3812 (2018)
- Yang, Y., Mayama, S., Hayashi, S. S., et al.: *High-contrast Polarimetry Observation of the T Tau Circumstellar Environment*. ApJ **861**, 133 (2018)
- 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)

- Zhang, C.-P., Liu, T., Yuan, J., et al.: *The TOP-SCOPE Survey of PGCCs: PMO and SCUBA-2 Observations of 64 PGCCs in the Second Galactic Quadrant*. *ApJS* **236**, 49 (2018)
- 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, L., van de Ven, G., Méndez-Abreu, J., et al.: *Morphology and kinematics of orbital components in CALIFA galaxies across the Hubble sequence*. *MNRAS* **479**, 945 (2018)
- Zuntz, J., Sheldon, E., Samuroff, S., et al.: *Dark Energy Survey Year 1 results: weak lensing shape catalogues*. *MNRAS* **481**, 1149 (2018)

5.2 Konferenzbeiträge

- Andrews, S. M., Birnstiel, T.: *Dust Evolution in Protoplanetary Disks*. In: *Handbook of Exoplanets, ISBN 978-3-319-55332-0. Springer International Publishing AG, part of Springer Nature, 2018, id.136*. 136 (2018)
- Buck, T., Macciò, A., Ness, M., et al.: *NIHAO-UHD: High-resolution Simulations of MW mass galaxies*. In: Chiappini, C., Minchev, I., Starkenburg, E., et al. (eds.): *Rediscovering Our Galaxy*. IAU Symposium **334**, 209 (2018)
- Davies, R., Alves, J., Clénet, Y., et al.: *The MICADO first light imager for the ELT: overview, operation, simulation*. In: *Ground-based and Airborne Instrumentation for Astronomy VII*. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series **10702**, 107021S (2018)
- Drazkowska, J.: *Planetesimal Formation in the Inner Region of the Protoplanetary Disk*. In: *Take a Closer Look*. 15 (2018)
- Haworth, T. J., Glover, S. C. O., Koepferl, C. M., et al.: *Synthetic observations of star formation and the interstellar medium*. *New A Rev.* **82**, 1 (2018)
- Hill, G. J., Kelz, A., Lee, H., et al.: *VIRUS: status and performance of the massively replicated fiber integral field spectrograph for the upgraded Hobby-Eberly Telescope*. In: *Ground-based and Airborne Instrumentation for Astronomy VII*. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series **10702**, 107021K (2018)
- Kümmel, M., Pilo, S., Castellano, M., et al.: *Data Challenges for the Euclid Cataloging Pipeline*. In: Lorente, N. P. F., Shortridge, K., Wayth, R. (eds.): *Astronomical Data Analysis Software and Systems XXV*. Astronomical Society of the Pacific Conference Series **512**, 329 (2017)
- Landry, G., Hansen, D., Kamp, F., et al.: *Comparing Unet training with three different datasets to correct CBCT images for prostate radiotherapy dose calculations*. *Physics in Medicine and Biology* (2018)
- Lang-Bardl, F., Monna, A., Grupp, F., et al.: *The MICADO Main Selection Mechanism (MSM): an operational mode selector for the MICADO instrument*. In: *Ground-based and Airborne Instrumentation for Astronomy VII*. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series **10702**, 107028Y (2018)

- Monna, A., Lang-Bardl, F., Grupp, F., et al.: *USM Test Cryostat for the MICADO project: first steps in stabilizing and testing the cryostat*. In: *Ground-based and Airborne Instrumentation for Astronomy VII*. Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series **10702**, 1070295 (2018)
- Munoz, M., Wade, G. A., Nazé, Y., et al.: *The Of?p Stars of the Magellanic Clouds: Are They Strongly Magnetic?* In: Wade, G. A., Baade, D., Guzik, J. A., et al. (eds.): *3rd BRITE Science Conference*. **8**, 43 (2018)
- Prichard, L. J., Davies, R. L., Beifiori, A., et al.: *A Massive Cluster in its Youth: the Fundamental Plane, Kinematics, and Ages for Cluster Galaxies at $z = 1.80$ in JKCS 041*. In: *American Astronomical Society Meeting Abstracts #231*. American Astronomical Society Meeting Abstracts **231**, 306.01 (2018)

5.3 Populärwissenschaftliche und sonstige Veröffentlichungen

- Harald Lesch: *Vom Allergrößten bis zum Allerkleinsten: Eine Reise vom Rand des Universums bis zum Kern des Atoms*. Hrsg. Komplet-Media, p. 128, ISBN 978-3-831-204762, München 2018

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