

Bonn

Argelander-Institut für Astronomie Rheinische Friedrich-Wilhelms-Universität Bonn

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0 Allgemeines

Am Argelander-Institut für Astronomie arbeiten fast 100 Wissenschaftler (ab Masterarbeit) sowie Personal in Technik und Verwaltung. Die Wissenschaftler sind an nationalen und internationalen Kooperationen beteiligt, insbesondere an Athena, CCAT-p, eROSITA, und Euclid. Es gibt ein umfangreiches Vorlesungsangebot für den M.Sc. in Astrophysics.

1 Personal und Ausstattung

Diese sowie weitere Angaben sind wegen des Bundesdatenschutzgesetzes unvollständig.

1.1 Personalstand

Professoren: 6

Prof. Dr. Frank Bertoldi, Prof. Dr. Frank Bigiel, Prof. Dr. Norbert Langer, Prof. Dr. Cristiano Porciani (Geschäftsführender Direktor ab Oktober), Prof. Dr. Thomas Reiprich (Geschäftsführender Direktor bis Oktober), Prof. Dr. Peter Schneider

Wissenschaftliche Mitarbeiter: 23

Dr. Ashley Barnes, Dr. Kaustuv Basu, Dr. Michel Bird, Dr. Oliver Cordes, Dr. Thomas Erben, Dr. Götz Gräfener, Dr. Luca Grassitelli, Dr. Jürgen Kerp, Dr. Joseph Kuruvilla, Dr. Ole Marggraf, Dr. Lydia Moser-Fischer, Dr. Stephanie Mühle, Dr. Reiko Nakajima, Dr. Florian Pacaud, Dr. Johannes Puschig, Dr. Emilio Romano-Diaz, Dr. Reinhold Schaaf, Dr. Abel Schootemeijer, Dr. Tim Schrabback, Dr. Patrick Simon, Dr. Martin Sommer, Dr. Malte Tewes, Dr. Ralf Timmermann

Doktoranden: 37

David Aguilera-Dena, Davit Alkhanishvili, Toma Badescu, Ivana Beslic, Pierre Burger, Maude Charmetant, Jakob den Brok, Ankur Dev, Cosima Eibensteiner, Jens Erler, Kevin Harrington, Ben Hastings, Beatrice Hernandez-Martin, Sven Heydenreich, Eric Jimenez Andrade, Tereza Jerabkova, Christos Karoumpis, Prachi Khatri, Laila Linke, Ana Mikler Celis, Konstantinos Migkas, Andres Navarro Alsina, Diana Scognamiglio, Alexander Schäbe, Christoph Schürmann, Koushik Sen, Zeinab Shafee, Benedetta Spina, Sandra Unruh, Jan van den Busch, Angie Veronica, Chen Wang, Tsan Wang, Kim Werner, Xian-Tiao Xu, Chaoli Zhang, Ronchuan Zhao, Hannah Zohren

Bachelor- und Masterstudenten: 26

Sylvia Adscheid (BSc), Jann Aschersleben (MSc), Elena Asencio Perez (MSc), Niklas Czubkowski (BSc), Yvonne Fichtner (MSc), Dong Han (BsC), Kathrin Grunthal (BSc), Melih Kara (MSc), Mandar Karandikar (MSc), Florian Kleinebreil (MsC), Kevin Levy (BsC), Laura Manns (MSc), Anne Michels (MSc), Yasaman Najafi Jozani (MSc), Vardan Nazaretyan (BSc), David Ohse (BSc), Aishwarya Paliwal (MSc), Daniel Pauli (MSc), Katharina Rauthmann (BSc), Dominik Rhiem (MSc), Victoria Schuy (BSc), Sabrina Stelter (BSc), Maria Tsedrik (MSc), Charitarth Vyas (MSc), Katharyna Vynokurova (MSc), Béibhinn Whelan (MSc)

Sekretariat und Verwaltung: 3

Sabine Derau, Ellen Fuhrmann, Elisabeth Kramer (Geschäftsführung)

Technische Mitarbeiter: 3

Andreas Bödewig, Alexander Feil, Uwe Sarter

2 Wissenschaftliche Arbeiten

Siehe Abschnitt 4.

3 Akademische Abschlussarbeiten

3.1 Bachelorarbeiten

Abgeschlossen: 3

3.2 Masterarbeiten

Abgeschlossen: 12

3.3 Dissertationen

Abgeschlossen: 5

Erler, Jens: “Spectro-spatial observations of galaxy clusters with Planck and CCAT-prime”
Hernandez Martin, Beatrice: “Weak lensing shape measurement calibration for relaxed clusters”

Jimenez Andrade, Eric Faustino: “Structural evolution of massive star-forming galaxies across cosmic time”

Unruh Sandra: “Weak lensing magnification & baryon acoustic oscillations in galaxy-galaxy lensing”

Werner, Kim: “Halo Bias Renormalisation”

3.4 Habilitationen

Abgeschlossen: 0

4 Veröffentlichungen

4.1 In referierten Zeitschriften (143)

1. du Buisson L., Marchant P., Podsiadlowski P., et al.: Cosmic rates of black hole mergers and pair-instability supernovae from chemically homogeneous binary evolution. *MNRAS* **499** (2020), 5941
2. Taylor E. N., Cluver M. E., Duffy A., et al.: GAMA + KiDS: empirical correlations between halo mass and other galaxy properties near the knee of the stellar-to-halo mass relation. *MNRAS* **499** (2020), 2896

3. Porth L., Smith R. E., Simon P., Marian L., Hilbert S.: Fast estimation of aperture mass statistics - I. Aperture mass variance and an application to the CFHTLenS data. *MNRAS* **499** (2020), 2474
4. Liu K., Guillemot L., Istrate A. G., et al.: A revisit of PSR J1909-3744 with 15-yr high-precision timing. *MNRAS* **499** (2020), 2276
5. Bestenlehner J. M., Crowther P. A., Caballero-Nieves S. M., et al.: The R136 star cluster dissected with Hubble Space Telescope/STIS - II. Physical properties of the most massive stars in R136. *MNRAS* **499** (2020), 1918
6. Cosentino G., Jiménez-Serra I., Henshaw J. D., et al.: SiO emission as a probe of cloud-cloud collisions in infrared dark clouds. *MNRAS* **499** (2020), 1666
7. Napolitano N. R., Li R., Spiniello C., et al.: Discovery of Two Einstein Crosses from Massive Post-blue Nugget Galaxies at $z > 1$ in KiDS. *ApJL* **904** (2020), L31
8. Esteban-Gutiérrez A., Agües-Paszukowsky N., Mediavilla E., Jiménez-Vicente J., Muñoz J. A., Heydenreich S.: The Impact of the Mass Spectrum of Lenses in Quasar Microlensing Studies. Constraints on a Mixed Population of Primordial Black Holes and Stars. *ApJ* **904** (2020), 176
9. Oskinova L. M., Gvaramadze V. V., Gräfener G., Langer N., Todt H.: X-rays observations of a super-Chandrasekhar object reveal an ONe and a CO white dwarf merger product embedded in a putative SN Iax remnant. *A&A* **644** (2020), L8
10. Martinelli M., Martins C. J. A. P., Nesseris S., et al.: Euclid: Forecast constraints on the cosmic distance duality relation with complementary external probes. *A&A* **644** (2020), A80
11. Pöntinen M., Granvik M., Nucita A. A., et al.: Euclid: Identification of asteroid streaks in simulated images using StreakDet software. *A&A* **644** (2020), A35
12. Euclid Collaboration, Desprez G., Paltani S., et al.: Euclid preparation. X. The Euclid photometric-redshift challenge. *A&A* **644** (2020), A31
13. Puschnig J., Hayes M., Östlin G., et al.: The Lyman Alpha Reference Sample. XI. Efficient turbulence-driven Ly α escape and an analysis of IR, CO, and [C II] $_{158}$ μ m. *A&A* **644** (2020), A10
14. Banerjee S.: LISA sources from young massive and open stellar clusters. *PhRvD* **102** (2020), 103002
15. Main R. A., Sanidas S. A., Antoniadis J., et al.: Measuring interstellar delays of PSR J0613-0200 over 7 yr, using the Large European Array for Pulsars. *MNRAS* **499** (2020), 1468
16. Hirai R., Sato T., Podsiadlowski P., Vigna-Gómez A., Mandel I.: Formation pathway for lonely stripped-envelope supernova progenitors: implications for Cassiopeia A. *MNRAS* **499** (2020), 1154
17. Vázquez-Mata J. A., Loveday J., Riggs S. D., et al.: Galaxy and mass assembly: luminosity and stellar mass functions in GAMA groups. *MNRAS* **499** (2020), 631
18. Parekh V., Thorat K., Kale R., et al.: MeerKAT's discovery of a radio relic in the bimodal merging cluster A2384. *MNRAS* **499** (2020), 404
19. Kreckel K., Ho I.-T., Blanc G. A., et al.: Measuring the mixing scale of the ISM within nearby spiral galaxies. *MNRAS* **499** (2020), 193

20. Barnes A. T., Longmore S. N., Dale J. E., Krumholz M. R., Kruijssen J. M. D., Bigiel F.: Which feedback mechanisms dominate in the high-pressure environment of the central molecular zone?. *MNRAS* **498** (2020), 4906
21. Efimov A. I., Lukanina L. A., Chashei I. V., Kolomiets S. F., Bird M. K., Paetzold M.: Observation of Disturbed Plasma Structures in the Environment of the Sun and Near-Earth Space with Radio Sounding and Local Measurements. *CosRe* **58** (2020), 460
22. Hatchfield H. P., Battersby C., Keto E., et al.: CMZoom. II. Catalog of Compact Submillimeter Dust Continuum Sources in the Milky Way's Central Molecular Zone. *ApJS* **251** (2020), 14
23. Bigiel F., de Looze I., Krabbe A., et al.: SOFIA/FIFI-LS Full-disk [C II] Mapping and CO-dark Molecular Gas across the Nearby Spiral Galaxy NGC 6946. *ApJ* **903** (2020), 30
24. de Blok W. J. G., Athanassoula E., Bosma A., et al.: MeerKAT HI commissioning observations of MHONGOOSE galaxy ESO 302-G014. *A&A* **643** (2020), A147
25. Tutusaus I., Martinelli M., Cardone V. F., et al.: Euclid: The importance of galaxy clustering and weak lensing cross-correlations within the photometric Euclid survey. *A&A* **643** (2020), A70
26. Franco M., Elbaz D., Zhou L., et al.: GOODS-ALMA: Using IRAC and VLA to probe fainter millimeter galaxies. *A&A* **643** (2020), A53
27. Franco M., Elbaz D., Zhou L., et al.: GOODS-ALMA: The slow downfall of star formation in $z = 2-3$ massive galaxies. *A&A* **643** (2020), A30
28. Schäbe A., Romano-Díaz E., Porciani C., Ludlow A. D., Tomassetti M.: A comparison of H₂ formation models at high redshift. *MNRAS* **497** (2020), 5008
29. Ianjamasimanana R., Namumba B., Ramaila A. J. T., et al.: MeerKAT-16 H I observation of the dIrr galaxy WLM. *MNRAS* **497** (2020), 4795
30. Walter F., Carilli C., Neeleman M., et al.: The Evolution of the Baryons Associated with Galaxies Averaged over Cosmic Time and Space. *ApJ* **902** (2020), 111
31. Aguilera-Dena D. R., Langer N., Antoniadis J., Müller B.: Precollapse Properties of Superluminous Supernovae and Long Gamma-Ray Burst Progenitor Models. *ApJ* **901** (2020), 114
32. Gaia Collaboration, Helmi A., van Leeuwen F., et al.: Gaia Data Release 2. The kinematics of globular clusters and dwarf galaxies around the Milky Way (Corrigendum). *A&A* **642** (2020), C1
33. Humire P. K., Thiel V., Henkel C., et al.: Sulphur and carbon isotopes towards Galactic centre clouds. *A&A* **642** (2020), A222
34. van den Busch J. L., Hildebrandt H., Wright A. H., et al.: Testing KiDS cross-correlation redshifts with simulations. *A&A* **642** (2020), A200
35. Euclid Collaboration, Guglielmo V., Saglia R., et al.: Euclid preparation. VIII. The Complete Calibration of the Colour-Redshift Relation survey: VLT/KMOS observations and data release. *A&A* **642** (2020), A192
36. Euclid Collaboration, Blanchard A., Camera S., et al.: Euclid preparation. VII. Forecast validation for Euclid cosmological probes. *A&A* **642** (2020), A191

37. Misra D., Fragos T., Tauris T. M., Zapartas E., Aguilera-Dena D. R.: The origin of pulsating ultra-luminous X-ray sources: Low- and intermediate-mass X-ray binaries containing neutron star accretors. *A&A* **642** (2020), A174
38. Puls J., Najarro F., Sundqvist J. O., Sen K.: Atmospheric NLTE models for the spectroscopic analysis of blue stars with winds. V. Complete comoving frame transfer, and updated modeling of X-ray emission. *A&A* **642** (2020), A172
39. Burger P., Schneider P., Demchenko V., Harnois-Deraps J., Heymans C., Hildebrandt H., Unruh S.: An adapted filter function for density split statistics in weak lensing. *A&A* **642** (2020), A161
40. Blake C., Amon A., Asgari M., et al.: Testing gravity using galaxy-galaxy lensing and clustering amplitudes in KiDS-1000, BOSS, and 2dFLenS. *A&A* **642** (2020), A158
41. Zhou L., Elbaz D., Franco M., et al.: GOODS-ALMA: Optically dark ALMA galaxies shed light on a cluster in formation at $z = 3.5$. *A&A* **642** (2020), A155
42. Fahr H. J., Heyl M.: Probing the thermodynamic conditions of the heliosheath plasma by shock wave propagation. *A&A* **642** (2020), A144
43. Ricci M., Adam R., Eckert D., et al.: The XXL Survey. XLIV. Sunyaev-Zel'dovich mapping of a low-mass cluster at $z \sim 1$: a multi-wavelength approach. *A&A* **642** (2020), A126
44. Trudeau A., Garrel C., Willis J., et al.: The XXL Survey. XLII. Detection and characterisation of the galaxy population of distant galaxy clusters in the XXL-N/VIDEO field: A tale of variety. *A&A* **642** (2020), A124
45. Dessart L., Yoon S.-C., Aguilera-Dena D. R., Langer N.: Supernovae Ib and Ic from the explosion of helium stars. *A&A* **642** (2020), A106
46. Dvornik A., Hoekstra H., Kuijken K., et al.: KiDS+GAMA: The weak lensing calibrated stellar-to-halo mass relation of central and satellite galaxies. *A&A* **642** (2020), A83
47. Syed J., Wang Y., Beuther H., et al.: Atomic and molecular gas properties during cloud formation. *A&A* **642** (2020), A68
48. Zhang C., Ramos-Ceja M. E., Pacaud F., Reiprich T. H.: High-redshift galaxy groups as seen by ATHENA/WFI. *A&A* **642** (2020), A17
49. Fritz K., Neumann L., Meinert M.: Ultralow Switching-Current Density in All-Amorphous $W_{-Hf/Co-Fe-B/TaO_x}$ Films. *PhRvP* **14** (2020), 034047
50. Barnes A. T., Kauffmann J., Bigiel F., et al.: LEGO - II. A 3 mm molecular line study covering 100 pc of one of the most actively star-forming portions within the Milky Way disc. *MNRAS* **497** (2020), 1972
51. Raihan S. F., Schrabback T., Hildebrandt H., Applegate D., Mahler G.: Testing the accuracy of 3D-HST photometric redshift estimates as reference samples for deep weak lensing studies. *MNRAS* **497** (2020), 1404
52. Kroupa P., Haslbauer M., Banik I., Nagesh S. T., Pflamm-Altenburg J.: Constraints on the star formation histories of galaxies in the Local Cosmological Volume. *MNRAS* **497** (2020), 37
53. Millon M., Tewes M., Bonvin V., Lengen B., Courbin F.: PyCS3: A Python toolbox for time-delay measurements in lensed quasars. *JOSS* **5** (2020), 2654

54. Smirnova K. I., Wiebe D. S., Moiseev A. V., Jozsa G. I. G.: Study of Star-Forming Regions in the Peculiar Galaxies NGC 660, NGC 1512, NGC 4395, and NGC 4618. *AstBu* **75** (2020), 234
55. Fragione G., Banerjee S.: Demographics of Neutron Stars in Young Massive and Open Clusters. *ApJL* **901** (2020), L16
56. Sun J., Leroy A. K., Schinnerer E., et al.: Molecular Gas Properties on Cloud Scales across the Local Star-forming Galaxy Population. *ApJL* **901** (2020), L8
57. Li J., Wang R., Cox P., et al.: Ionized and Atomic Interstellar Medium in the $z = 6.003$ Quasar SDSS J2310+1855. *ApJ* **900** (2020), 131
58. Li Q., Wang R., Fan X., et al.: SCUBA2 High Redshift Bright Quasar Survey: Far-infrared Properties and Weak-line Features. *ApJ* **900** (2020), 12
59. Hastings B., Langer N., Koenigsberger G.: Internal circulation in tidally locked massive binary stars: Consequences for double black hole formation. *A&A* **641** (2020), A86
60. Wang Y., Beuther H., Schneider N., et al.: Dense gas in a giant molecular filament. *A&A* **641** (2020), A53
61. Wang T.-M., Hwang C.-Y.: Influence of velocity dispersions on star-formation activities in galaxies. *A&A* **641** (2020), A24
62. Gillis B. R., Schrabback T., Marggraf O., Mandelbaum R., Massey R., Rhodes J., Taylor A.: Validation of PSF models for HST and other space-based observations. *MNRAS* **496** (2020), 5017
63. Rhodes L., van der Horst A. J., Fender R., et al.: Radio afterglows of very high-energy gamma-ray bursts 190829A and 180720B. *MNRAS* **496** (2020), 3326
64. Bellstedt S., Driver S. P., Robotham A. S. G., et al.: Galaxy And Mass Assembly (GAMA): assimilation of KiDS into the GAMA database. *MNRAS* **496** (2020), 3235
65. Battersby C., Keto E., Walker D., et al.: CMZoom: Survey Overview and First Data Release. *ApJS* **249** (2020), 35
66. Yu H. Z., Zhang J. S., Henkel C., et al.: Galactic Interstellar Sulfur Isotopes: A Radial $^{32}\text{S}/^{34}\text{S}$ Gradient?. *ApJ* **899** (2020), 145
67. Leslie S. K., Schinnerer E., Liu D., et al.: The VLA-COSMOS 3 GHz Large Project: Evolution of Specific Star Formation Rates out to $z \sim 5$. *ApJ* **899** (2020), 58
68. Belczynski K., Banerjee S.: Formation of low-spinning $100 M_{\odot}$ black holes. *A&A* **640** (2020), L20
69. Hernández-Martín B., Schrabback T., Hoekstra H., et al.: Constraining the masses of high-redshift clusters with weak lensing: Revised shape calibration testing for the impact of stronger shears and increased blending. *A&A* **640** (2020), A117
70. Millon M., Courbin F., Bonvin V., et al.: COSMOGRAIL. XIX. Time delays in 18 strongly lensed quasars from 15 years of optical monitoring. *A&A* **640** (2020), A105
71. Adak D., Ghosh T., Boulanger F., Haud U., Kalberla P., Martin P. G., Bracco A., Souradeep T.: Dust polarization modelling at large scale over the northern Galactic cap using EBHIS and Planck data. *A&A* **640** (2020), A100

72. Castignani G., Jablonka P., Combes F., et al.: Molecular gas and star formation activity in luminous infrared galaxies in clusters at intermediate redshifts. *A&A* **640** (2020), A64
73. Linke L., Simon P., Schneider P., et al.: KiDS+VIKING+GAMA: Testing semi-analytic models of galaxy evolution with galaxy-galaxy-galaxy lensing. *A&A* **640** (2020), A59
74. Ramatsoku M., Serra P., Poggianti B. M., et al.: GASP. XXVI. HI gas in jellyfish galaxies: The case of JO201 and JO206. *A&A* **640** (2020), A22
75. Henshaw J. D., Kruijssen J. M. D., Longmore S. N., et al.: Ubiquitous velocity fluctuations throughout the molecular interstellar medium. *NatAs* **4** (2020), 1064
76. Kuruvilla J., Porciani C.: The n-point streaming model: how velocities shape correlation functions in redshift space. *JCAP* **2020** (2020), 043
77. Lang P., Meidt S. E., Rosolowsky E., et al.: PHANGS CO Kinematics: Disk Orientations and Rotation Curves at 150 pc Resolution. *ApJ* **897** (2020), 122
78. González-López J., Novak M., Decarli R., et al.: The ALMA Spectroscopic Survey in the HUDF: Deep 1.2 mm Continuum Number Counts. *ApJ* **897** (2020), 91
79. Koribalski B. S., Staveley-Smith L., Westmeier T., et al.: WALLABY - an SKA Pathfinder HI survey. *Ap&SS* **365** (2020), 118
80. Kramer C., Nikola T., Anderl S., et al.: Gas and dust cooling along the major axis of M 33 (HerM33es). Herschel/PACS [C II] and [O I] observations. *A&A* **639** (2020), A61
81. Banerjee S., Belczynski K., Fryer C. L., Berczik P., Hurley J. R., Spurzem R., Wang L.: BSE versus StarTrack: Implementations of new wind, remnant-formation, and natal-kick schemes in NBODY7 and their astrophysical consequences. *A&A* **639** (2020), A41
82. Kalberla P. M. W., Kerp J., Haud U.: HI filaments are cold and associated with dark molecular gas. HI4PI-based estimates of the local diffuse CO-dark H₂ distribution. *A&A* **639** (2020), A26
83. den Brok J. S., Cantalupo S., Mackenzie R., et al.: Probing the AGN unification model at redshift $z \simeq 3$ with MUSE observations of giant Ly α nebulae. *MNRAS* **495** (2020), 1874
84. Cotton W. D., Thorat K., Condon J. J., et al.: Hydrodynamical backflow in X-shaped radio galaxy PKS 2014-55. *MNRAS* **495** (2020), 1271
85. Tortora C., Napolitano N. R., Radovich M., et al.: Nature versus nurture: relic nature and environment of the most massive passive galaxies at $z < 0.5$. *A&A* **638** (2020), L11
86. Joudaki S., Hildebrandt H., Traykova D., et al.: KiDS+VIKING-450 and DES-Y1 combined: Cosmology with cosmic shear. *A&A* **638** (2020), L1
87. Euclid Collaboration, Paykari P., Kitching T., et al.: Euclid preparation. VI. Verifying the Performance of Cosmic Shear Experiments (Corrigendum). *A&A* **638** (2020), C2
88. Pires S., Vandebussche V., Kansal V., et al.: Euclid: Reconstruction of weak-lensing mass maps for non-Gaussianity studies. *A&A* **638** (2020), A141

89. Unruh S., Schneider P., Hilbert S., Simon P., Martin S., Puertas J. C.: The importance of magnification effects in galaxy-galaxy lensing. *A&A* **638** (2020), A96
90. Langer N., Schürmann C., Stoll K., et al.: Properties of OB star-black hole systems derived from detailed binary evolution models. *A&A* **638** (2020), A39
91. Bisigello L., Kuchner U., Conselice C. J., et al.: Euclid: the selection of quiescent and star-forming galaxies using observed colours. *MNRAS* **494** (2020), 2337
92. Mahler G., Sharon K., Gladders M. D., et al.: Strong Lensing Model of SPT-CL J0356-5337, a Major Merger Candidate at Redshift 1.0359. *ApJ* **894** (2020), 150
93. Hankins M. J., Lau R. M., Radomski J. T., et al.: SOFIA/FORCAST Galactic Center Legacy Survey: Overview. *ApJ* **894** (2020), 55
94. Gaia Collaboration, Helmi A., van Leeuwen F., et al.: Gaia Data Release 2. Kinematics of globular clusters and dwarf galaxies around the Milky Way (Corrigendum). *A&A* **637** (2020), C3
95. Chevance M., Kruijssen J. M. D., Hygate A. P. S., et al.: The lifecycle of molecular clouds in nearby star-forming disc galaxies. *MNRAS* **493** (2020), 2872
96. Scognamiglio D., Tortora C., Spavone M., et al.: Building the Largest Spectroscopic Sample of Ultracompact Massive Galaxies with the Kilo Degree Survey. *ApJ* **893** (2020), 4
97. Sun J., Leroy A. K., Ostriker E. C., et al.: Dynamical Equilibrium in the Molecular ISM in 28 Nearby Star-forming Galaxies. *ApJ* **892** (2020), 148
98. Utreras J., Blanc G. A., Escala A., et al.: When Gas Dynamics Decouples from Galactic Rotation: Characterizing ISM Circulation in Disk Galaxies. *ApJ* **892** (2020), 94
99. Meidt S. E., Glover S. C. O., Kruijssen J. M. D., et al.: A Model for the Onset of Self-gravitation and Star Formation in Molecular Gas Governed by Galactic Forces. II. The Bottleneck to Collapse Set by Cloud-Environment Decoupling. *ApJ* **892** (2020), 73
100. Ramatsoku M., Murgia M., Vacca V., et al.: Collimated synchrotron threads linking the radio lobes of ESO 137-006. *A&A* **636** (2020), L1
101. Deshpande A. C., Kitching T. D., Cardone V. F., et al.: Euclid: The reduced shear approximation and magnification bias for Stage IV cosmic shear experiments. *A&A* **636** (2020), A95
102. Schmitz M. A., Starck J.-L., Ngole Mboula F., et al.: Euclid: Nonparametric point spread function field recovery through interpolation on a graph Laplacian. *A&A* **636** (2020), A78
103. van Gelder M. L., Kaper L., Japelj J., et al.: VLT/X-shooter spectroscopy of massive young stellar objects in the 30 Doradus region of the Large Magellanic Cloud. *A&A* **636** (2020), A54
104. Migkas K., Schellenberger G., Reiprich T. H., Pacaud F., Ramos-Ceja M. E., Lovisari L.: Probing cosmic isotropy with a new X-ray galaxy cluster sample through the L_X -T scaling relation. *A&A* **636** (2020), A15
105. Square Kilometre Array Cosmology Science Working Group, Bacon D. J., Battye R. A., et al.: Cosmology with Phase 1 of the Square Kilometre Array Red Book 2018: Technical specifications and performance forecasts. *PASA* **37** (2020), e007

106. Gvaramadze V. V., Kniazev A. Y., Gräfener G., Langer N.: WR 72: a born-again planetary nebula with hydrogen-poor knots. *MNRAS* **492** (2020), 3316
107. Choi S. K., Austermann J., Basu K., et al.: Sensitivity of the Prime-Cam Instrument on the CCAT-Prime Telescope. *JLTP* **199** (2020), 1089
108. Oddo A., Sefusatti E., Porciani C., Monaco P., Sánchez A. G.: Toward a robust inference method for the galaxy bispectrum: likelihood function and model selection. *JCAP* **2020** (2020), 056
109. Bleem L. E., Bocquet S., Stalder B., et al.: The SPTpol Extended Cluster Survey. *ApJS* **247** (2020), 25
110. Magnelli B., Boogaard L., Decarli R., et al.: The ALMA Spectroscopic Survey in the HUDF: The Cosmic Dust and Gas Mass Densities in Galaxies up to $z \sim 3$. *ApJ* **892** (2020), 66
111. Cassata P., Liu D., Groves B., et al.: ALMA Reveals the Molecular Gas Properties of Five Star-forming Galaxies across the Main Sequence at 3. *ApJ* **891** (2020), 83
112. Euclid Collaboration, Paykari P., Kitching T., et al.: Euclid preparation. VI. Verifying the performance of cosmic shear experiments. *A&A* **635** (2020), A139
113. Antoniadis J., Chanlaridis S., Gräfener G., Langer N.: Type Ia supernovae from non-accreting progenitors. *A&A* **635** (2020), A72
114. Grundy W. M., Bird M. K., Britt D. T., et al.: Color, composition, and thermal environment of Kuiper Belt object (486958) Arrokoth. *Sci* **367** (2020), aay3705
115. Puschnig J., Wallner S., Posch T.: Circalunar variations of the night sky brightness - an FFT perspective on the impact of light pollution. *MNRAS* **492** (2020), 2622
116. Werner K. F., Porciani C.: Renormalization of linear halo bias in N-body simulations. *MNRAS* **492** (2020), 1614
117. Khan F. M., Mirza M. A., Holley-Bockelmann K.: Inward bound: the incredible journey of massive black holes as they pair and merge - I. The effect of mass ratio in flattened rotating galactic nuclei. *MNRAS* **492** (2020), 256
118. Fudamoto Y., Oesch P. A., Magnelli B., et al.: A3COSMOS: the dust attenuation of star-forming galaxies at $z = 2.5-4.0$ from the COSMOS-ALMA archive. *MNRAS* **491** (2020), 4724
119. Jiménez-Andrade E. F., Zavala J. A., Magnelli B., et al.: The Redshift and Star Formation Mode of AzTEC2: A Pair of Massive Galaxies at $z = 4.63$. *ApJ* **890** (2020), 171
120. Umetsu K., Sereno M., Lieu M., et al.: Weak-lensing Analysis of X-Ray-selected XXL Galaxy Groups and Clusters with Subaru HSC Data. *ApJ* **890** (2020), 148
121. Ferrarese L., Côté P., MacArthur L. A., et al.: The Next Generation Virgo Cluster Survey (NGVS). XIV. The Discovery of Low-mass Galaxies and a New Galaxy Catalog in the Core of the Virgo Cluster. *ApJ* **890** (2020), 128
122. Butterfield N. O., Ginsburg A., Ludovici D. A., Barnes A., Dunnagan R., Lang C. C., Morris M. R.: 6.7 GHz CH₃OH Absorption toward the N3 Galactic Center Point Source. *ApJ* **889** (2020), 174
123. Li J., Wang R., Riechers D., et al.: Probing the Full CO Spectral Line Energy Distribution (SLED) in the Nuclear Region of a Quasar-starburst System at $z = 6.003$. *ApJ* **889** (2020), 162

124. Wang Y., Bihl S., Beuther H., et al.: Cloud formation in the atomic and molecular phase: H I self absorption (HISA) towards a giant molecular filament. *A&A* **634** (2020), A139
125. Asgari M., Tröster T., Heymans C., et al.: KiDS+VIKING-450 and DES-Y1 combined: Mitigating baryon feedback uncertainty with COSEBIs. *A&A* **634** (2020), A127
126. Herrera C. N., Pety J., Hughes A., et al.: The headlight cloud in NGC 628: An extreme giant molecular cloud in a typical galaxy disk. *A&A* **634** (2020), A121
127. Mahy L., Almeida L. A., Sana H., et al.: The Tarantula Massive Binary Monitoring. IV. Double-lined photometric binaries. *A&A* **634** (2020), A119
128. Mahy L., Sana H., Abdul-Masih M., et al.: The Tarantula Massive Binary Monitoring. III. Atmosphere analysis of double-lined spectroscopic systems. *A&A* **634** (2020), A118
129. Heydenreich S., Schneider P., Hildebrandt H., et al.: The effects of varying depth in cosmic shear surveys. *A&A* **634** (2020), A104
130. Wang Y., Beuther H., Rugel M. R., et al.: The HI/OH/Recombination line survey of the inner Milky Way (THOR): data release 2 and H I overview. *A&A* **634** (2020), A83
131. Bodensteiner J., Sana H., Mahy L., et al.: The young massive SMC cluster NGC 330 seen by MUSE. I. Observations and stellar content. *A&A* **634** (2020), A51
132. Linke L., Simon P., Schneider P., Hilbert S.: Measuring galaxy-galaxy-galaxy-lensing with higher precision and accuracy. *A&A* **634** (2020), A13
133. Maccagni F. M., Murgia M., Serra P., et al.: The flickering nuclear activity of Fornax A. *A&A* **634** (2020), A9
134. Fahr H.-J., Heyl M.: Suprathermal plasma distribution functions with relativistic cut-offs. *MNRAS* **491** (2020), 3967
135. Wang L.: The survival of star clusters with black hole subsystems. *MNRAS* **491** (2020), 2413
136. Wang L., Kroupa P., Takahashi K., Jerabkova T.: The possible role of stellar mergers for the formation of multiple stellar populations in globular clusters. *MNRAS* **491** (2020), 440
137. Efimov A. I., Lukanina L. A., Smirnov V. M., Chashei I. V., Bird M. K., Pätzold M.: Disturbed Flows in the Inner Solar Wind and Near Earth's Orbit. *CosRe* **57** (2020), 423
138. Wang C., Langer N., Schootemeijer A., Castro N., Adscheid S., Marchant P., Hastings B.: Effects of Close Binary Evolution on the Main-sequence Morphology of Young Star Clusters. *ApJL* **888** (2020), L12
139. Hastings B., Wang C., Langer N.: The single star path to Be stars. *A&A* **633** (2020), A165
140. Busch L. A., Belloche A., Cabrit S., Hennebelle P., Commerçon B.: The dynamically young outflow of the Class 0 protostar Cha-MMS1. *A&A* **633** (2020), A126
141. Xia Q., Robertson N., Heymans C., et al.: A gravitational lensing detection of filamentary structures connecting luminous red galaxies. *A&A* **633** (2020), A89

142. Hildebrandt H., Köhlinger F., van den Busch J. L., et al.: KiDS+VIKING-450: Cosmic shear tomography with optical and infrared data. *A&A* **633** (2020), A69
143. Langer N., Baade D., Bodensteiner J., Greiner J., Rivinius T., Martayan C., Borre C. C.: γ Cas stars: Normal Be stars with discs impacted by the wind of a helium-star companion?. *A&A* **633** (2020), A40

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