

Holger Baumgardt

List of Publications by Year in descending order

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Version: 2024-02-01

115
papers

8,679
citations

38742

50
h-index

43889

91
g-index

115
all docs

115
docs citations

115
times ranked

4116
citing authors

#	ARTICLE	IF	CITATIONS
1	Stellar mass segregation as separating classifier between globular clusters and ultrafaint dwarf galaxies. Monthly Notices of the Royal Astronomical Society, 2022, 510, 3531-3545.	4.4	10
2	The dynamics of the globular cluster NGC 3201 out to the Jacobi radius. Monthly Notices of the Royal Astronomical Society, 2021, 502, 4513-4525.	4.4	20
3	Accurate distances to Galactic globular clusters through a combination of <i>Gaia</i> EDR3, <i>HST</i> , and literature data. Monthly Notices of the Royal Astronomical Society, 2021, 505, 5957-5977.	4.4	159
4	<i>Gaia</i> EDR3 view on galactic globular clusters. Monthly Notices of the Royal Astronomical Society, 2021, 505, 5978-6002.	4.4	206
5	Testing the tidal stripping scenario of ultracompact dwarf galaxy formation by using internal properties. Monthly Notices of the Royal Astronomical Society, 2021, 506, 2459-2470.	4.4	3
6	Towards realistic modelling of the astrometric capabilities of MCAO systems: detecting an intermediate-mass black hole with MAVIS. Monthly Notices of the Royal Astronomical Society, 2021, 507, 2192-2207.	4.4	3
7	Central kinematics of the Galactic globular cluster M80. Monthly Notices of the Royal Astronomical Society, 2021, 507, 4788-4803.	4.4	5
8	Accelerating NBODY6 with a graphics processing unit-enabled Particle-Particle Particle-Tree scheme. Monthly Notices of the Royal Astronomical Society, 2021, 509, 2075-2083.	4.4	3
9	Multiple populations in globular clusters and their parent galaxies. Monthly Notices of the Royal Astronomical Society, 2020, 491, 515-531.	4.4	66
10	Absolute r -band magnitudes and mass-to-light ratios of Galactic globular clusters. Publications of the Astronomical Society of Australia, 2020, 37, .	3.4	37
11	Three-component Kinematics of Multiple Stellar Populations in Globular Clusters with <i>Gaia</i> and VLT. Astrophysical Journal, 2020, 889, 18.	4.5	33
12	The WAGGS project-III. Discrepant mass-to-light ratios of Galactic globular clusters at high metallicity. Monthly Notices of the Royal Astronomical Society, 2020, 492, 3859-3871.	4.4	14
13	New insight into the stellar mass function of Galactic globular clusters. Monthly Notices of the Royal Astronomical Society, 2020, 494, 4226-4243.	4.4	13
14	Contribution of stripped nuclei to the ultracompact dwarf galaxy population in the Virgo cluster. Monthly Notices of the Royal Astronomical Society, 2020, 501, 1852-1867.	4.4	6
15	<i>Hubble</i> Space Telescope photometry of multiple stellar populations in the inner parts of NGC 2419. Astronomy and Astrophysics, 2019, 624, A25.	5.1	10
16	No evidence for intermediate-mass black holes in the globular clusters ω Cen and NGC 6624. Monthly Notices of the Royal Astronomical Society, 2019, 488, 5340-5351.	4.4	50
17	Mass modelling globular clusters in the <i>Gaia</i> era: a method comparison using mock data from an <i>N</i> -body simulation of $M \approx 4$. Monthly Notices of the Royal Astronomical Society, 2019, 483, 1400-1425.	4.4	26
18	The eye of <i>Gaia</i> on globular clusters kinematics: internal rotation. Monthly Notices of the Royal Astronomical Society, 2019, 485, 1460-1476.	4.4	65

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19	A Multimass Velocity Dispersion Model of 47 Tucanae Indicates No Evidence for an Intermediate-mass Black Hole. <i>Astrophysical Journal</i> , 2019, 875, 1.	4.5	192
20	The Milky Way like galaxy NGC 6384 and its nuclear star cluster at high NIR spatial resolution using LBT/ARGOS commissioning data. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 484, 3356-3375.	4.4	8
21	The Impact of Stripped Nuclei on the Supermassive Black Hole Number Density in the Local Universe. <i>Astrophysical Journal</i> , 2019, 871, 159.	4.5	35
22	The eye of Gaia on globular cluster kinematics: Internal rotation. <i>Proceedings of the International Astronomical Union</i> , 2019, 14, 516-519.	0.0	0
23	On the presence of intermediate black holes in three globular clusters. <i>Proceedings of the International Astronomical Union</i> , 2019, 14, 400-403.	0.0	1
24	Galactic Globular Clusters: A new catalog of masses, structural parameters, velocity dispersion profiles, proper motions and space orbits. <i>Proceedings of the International Astronomical Union</i> , 2019, 14, 451-454.	0.0	13
25	Mean proper motions, space orbits, and velocity dispersion profiles of Galactic globular clusters derived from Gaia DR2 data. <i>Monthly Notices of the Royal Astronomical Society</i> , 2019, 482, 5138-5155.	4.4	302
26	The distribution of stars around the Milky Way's central black hole. <i>Astronomy and Astrophysics</i> , 2018, 609, A28.	5.1	63
27	The black hole retention fraction in star clusters. <i>Astronomy and Astrophysics</i> , 2018, 617, A69.	5.1	11
28	Radiation pressure limits on the star formation efficiency and surface density of compact stellar systems. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 481, 4895-4906.	4.4	17
29	A catalogue of masses, structural parameters, and velocity dispersion profiles of 112 Milky Way globular clusters. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 478, 1520-1557.	4.4	333
30	Upper Limits on the Presence of Central Massive Black Holes in Two Ultra-compact Dwarf Galaxies in Centaurus A. <i>Astrophysical Journal</i> , 2018, 858, 20.	4.5	28
31	A 3.5 million Solar masses black hole in the centre of the ultracompact dwarf galaxy Fornax UCD3. <i>Monthly Notices of the Royal Astronomical Society</i> , 2018, 477, 4856-4865.	4.4	53
32	The Black Hole in the Most Massive Ultracompact Dwarf Galaxy M59-UCD3. <i>Astrophysical Journal</i> , 2018, 858, 102.	4.5	59
33	A luminous X-ray outburst from an intermediate-mass black hole in an off-centre star cluster. <i>Nature Astronomy</i> , 2018, 2, 656-661.	10.1	96
34	An intermediate-mass black hole in the centre of the globular cluster 47 Tucanae. <i>Nature</i> , 2017, 542, 203-205.	27.8	149
35	Detection of Supermassive Black Holes in Two Virgo Ultracompact Dwarf Galaxies. <i>Astrophysical Journal</i> , 2017, 839, 72.	4.5	75
36	Diffuse Galactic antimatter from faint thermonuclear supernovae in old stellar populations. <i>Nature Astronomy</i> , 2017, 1, .	10.1	40

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37	<i>N</i> -body modelling of globular clusters: masses, mass-to-light ratios and intermediate-mass black holes. Monthly Notices of the Royal Astronomical Society, 2017, 464, 2174-2202.	4.4	157
38	The global mass functions of 35 Galactic globular clusters: I. Observational data and correlations with cluster parameters. Monthly Notices of the Royal Astronomical Society, 2017, 471, 3668-3679.	4.4	60
39	The global mass functions of 35 Galactic globular clusters – II. Clues on the initial mass function and black hole retention fraction. Monthly Notices of the Royal Astronomical Society, 2017, 472, 744-750.	4.4	33
40	Unveiling Gargantua: A new search strategy for the most massive central cluster black holes. Astronomy and Astrophysics, 2016, 585, A153.	5.1	3
41	Probing the boundary between star clusters and dwarf galaxies: A MUSE view on the dynamics of Crater/Laevens A1. Monthly Notices of the Royal Astronomical Society, 2016, 460, 3384-3397.	4.4	21
42	Constraining ultracompact dwarf galaxy formation with galaxy clusters in the local universe. Monthly Notices of the Royal Astronomical Society, 2016, 458, 2492-2508.	4.4	35
43	Limits on the significant mass-loss scenario based on the globular clusters of the Fornax dwarf spheroidal galaxy. Monthly Notices of the Royal Astronomical Society, 2016, 457, 479-486.	4.4	9
44	Kinematics of dwarf galaxies in gas-rich groups, and the survival and detectability of tidal dwarf galaxies. Monthly Notices of the Royal Astronomical Society, 2016, 455, 2508-2528.	4.4	7
45	The binary fraction and mass segregation in Alpha Persei open cluster. Monthly Notices of the Royal Astronomical Society, 2016, 457, 1028-1036.	4.4	17
46	Dynamical Evolution of Stellar Systems. EAS Publications Series, 2016, 80-81, 39-72.	0.3	0
47	Intermediate-mass black holes in globular clusters: observations and simulations - Update. Proceedings of the International Astronomical Union, 2015, 12, 240-245.	0.0	0
48	Re-evaluation of the central velocity-dispersion profile in NGC 6388. Astronomy and Astrophysics, 2015, 581, A1.	5.1	32
49	Dynamical Evolution of Outer-Halo Globular Clusters. Proceedings of the International Astronomical Union, 2015, 12, 257-258.	0.0	0
50	Biases in the determination of dynamical parameters of star clusters: today and in the Gaia era. Monthly Notices of the Royal Astronomical Society, 2015, 451, 2185-2197.	4.4	36
51	RADIAL DISTRIBUTIONS OF SUB-POPULATIONS IN THE GLOBULAR CLUSTER M15: A MORE CENTRALLY CONCENTRATED PRIMORDIAL POPULATION. Astrophysical Journal, 2015, 804, 71.	4.5	46
52	Dynamical constraints on the origin of multiple stellar populations in globular clusters. Monthly Notices of the Royal Astronomical Society, 2015, 452, 924-936.	4.4	28
53	Possible smoking-gun evidence for initial mass segregation in re-virialized post-gas expulsion globular clusters. Monthly Notices of the Royal Astronomical Society, 2015, 454, 3872-3885.	4.4	21
54	A prescription and fast code for the long-term evolution of star clusters – III. Unequal masses and stellar evolution. Monthly Notices of the Royal Astronomical Society, 2014, 442, 1265-1285.	4.4	31

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55	Contribution of stripped nuclear clusters to globular cluster and ultracompact dwarf galaxy populations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 444, 3670-3683.	4.4	78
56	Direct N-body simulations of globular clusters â€“ II. Palomarâˆ4. <i>Monthly Notices of the Royal Astronomical Society</i> , 2014, 440, 3172-3183.	4.4	35
57	A supermassive black hole in an ultra-compact dwarf galaxy. <i>Nature</i> , 2014, 513, 398-400.	27.8	203
58	Intermediate-mass black holes in globular clusters: observations and simulations. <i>Proceedings of the International Astronomical Union</i> , 2014, 10, 181-188.	0.0	2
59	The stellar mass function, binary content and radial structure of the open cluster Praesepe derived from PPMXL and SDSS data. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 434, 3236-3245.	4.4	41
60	The star cluster formation history of the LMC. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 430, 676-685.	4.4	98
61	Ultra-compact dwarf galaxy formation by tidal stripping of nucleated dwarf galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 433, 1997-2005.	4.4	102
62	The evolution of the global stellar mass function of star clusters: an analytic description. <i>Monthly Notices of the Royal Astronomical Society</i> , 2013, 433, 1378-1388.	4.4	24
63	On central black holes in ultra-compact dwarf galaxies. <i>Astronomy and Astrophysics</i> , 2013, 558, A14.	5.1	80
64	Limits on intermediate-mass black holes in six Galactic globular clusters with integral-field spectroscopy. <i>Astronomy and Astrophysics</i> , 2013, 552, A49.	5.1	85
65	Indication for an intermediate-mass black hole in the globular cluster NGC 5286 from kinematics. <i>Astronomy and Astrophysics</i> , 2013, 554, A63.	5.1	37
66	<i>N</i> -body simulations of globular clusters in tidal fields: Effects of intermediate-mass black holes. <i>Astronomy and Astrophysics</i> , 2013, 558, A117.	5.1	40
67	A Dynamical <i>N</i> -body model for the central region of <i>Centauri</i> . <i>Astronomy and Astrophysics</i> , 2012, 538, A19.	5.1	33
68	Central kinematics of the globular cluster NGC 2808: upper limit on the mass of an intermediate-mass black hole. <i>Astronomy and Astrophysics</i> , 2012, 542, A129.	5.1	29
69	High-velocity stars in the cores of globular clusters: the illustrative case of NGC 2808. <i>Astronomy and Astrophysics</i> , 2012, 543, A82.	5.1	23
70	A SEARCH FOR AN INTERMEDIATE-MASS BLACK HOLE IN THE CORE OF THE GLOBULAR CLUSTER NGC 6266. <i>Astrophysical Journal</i> , 2012, 745, 175.	4.5	28
71	The mass function and dynamical mass of young star clusters: why their initial crossing-time matters crucially. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 427, 1940-1952.	4.4	11
72	The velocity dispersion and mass function of the outer halo globular cluster Palomar 4. <i>Monthly Notices of the Royal Astronomical Society</i> , 2012, 423, 2917-2932.	4.4	36

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73	TESTING PHOTOMETRIC DIAGNOSTICS FOR THE DYNAMICAL STATE AND POSSIBLE INTERMEDIATE-MASS BLACK HOLE PRESENCE IN GLOBULAR CLUSTERS. <i>Astrophysical Journal</i> , 2011, 743, 52.	4.5	21
74	Kinematic signature of an intermediate-mass black hole in the globular cluster NGC 6388. <i>Astronomy and Astrophysics</i> , 2011, 533, A36.	5.1	76
75	Direct N-body simulations of globular clusters - I. Palomar 14. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 411, 1989-2001.	4.4	65
76	Mass segregation and fractal substructure in young massive clusters - I. The MCLuster code and method calibration. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 417, 2300-2317.	4.4	143
77	Tidal disruption rate of stars by supermassive black holes obtained by direct N-body simulations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2011, 418, 1308-1324.	4.4	50
78	Spatially resolved kinematics of an ultracompact dwarf galaxy. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2011, 414, L70-L74.	3.3	42
79	VERY LARGE TELESCOPE KINEMATICS FOR OMEGA CENTAURI: FURTHER SUPPORT FOR A CENTRAL BLACK HOLE. <i>Astrophysical Journal Letters</i> , 2010, 719, L60-L64.	8.3	91
80	Evolution of two stellar populations in globular clusters. <i>Astronomy and Astrophysics</i> , 2010, 516, A73.	5.1	56
81	On the mass-radius relation of hot stellar systems. <i>Monthly Notices of the Royal Astronomical Society: Letters</i> , 2010, 408, L16-L20.	3.3	83
82	Evidence for two populations of Galactic globular clusters from the ratio of their half-mass to Jacobi radii. <i>Monthly Notices of the Royal Astronomical Society</i> , 2010, 401, 1832-1838.	4.4	78
83	Stellar-mass black holes in star clusters: implications for gravitational wave radiation. <i>Monthly Notices of the Royal Astronomical Society</i> , 2010, 402, 371-380.	4.4	198
84	Constraining the initial mass function of stars in the Galactic Centre. <i>Monthly Notices of the Royal Astronomical Society</i> , 2010, 402, 519-525.	4.4	39
85	TESTING FUNDAMENTAL PHYSICS WITH DISTANT STAR CLUSTERS: ANALYSIS OF OBSERVATIONAL DATA ON PALOMAR 14, . <i>Astronomical Journal</i> , 2009, 137, 4586-4596.	4.7	65
86	A top-heavy stellar initial mass function in starbursts as an explanation for the high mass-to-light ratios of ultra-compact dwarf galaxies. <i>Monthly Notices of the Royal Astronomical Society</i> , 2009, 394, 1529-1543.	4.4	116
87	Globular cluster systems in nearby dwarf galaxies - II. Nuclear star clusters and their relation to massive Galactic globular clusters. <i>Monthly Notices of the Royal Astronomical Society</i> , 2009, 396, 1075-1085.	4.4	105
88	The velocity dispersion and mass-to-light ratio of the remote halo globular cluster NGC 2419. <i>Monthly Notices of the Royal Astronomical Society</i> , 2009, 396, 2051-2060.	4.4	81
89	The influence of residual gas expulsion on the evolution of the Galactic globular cluster system and the origin of the Population II halo. <i>Monthly Notices of the Royal Astronomical Society</i> , 2008, 384, 1231-1241.	4.4	119
90	A new method to create initially mass segregated star clusters in virial equilibrium. <i>Monthly Notices of the Royal Astronomical Society</i> , 2008, 385, 1673-1680.	4.4	31

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91	The influence of gas expulsion and initial mass segregation on the stellar mass function of globular star clusters. Monthly Notices of the Royal Astronomical Society, 2008, 386, 2047-2054.	4.4	48
92	The main sequence of star clusters. Monthly Notices of the Royal Astronomical Society, 2008, 389, 889-902.	4.4	36
93	High mass-to-light ratios of ultra-compact dwarf galaxies - evidence for dark matter?. Monthly Notices of the Royal Astronomical Society, 2008, 391, 942-948.	4.4	47
94	Evidence for Primordial Mass Segregation in Globular Clusters. Astrophysical Journal, 2008, 685, 247-253.	4.5	94
95	The evolution of two stellar populations in globular clusters. Astronomy and Astrophysics, 2008, 492, 101-109.	5.1	54
96	The nature of UCDs: Internal dynamics from an expanded sample and homogeneous database. Astronomy and Astrophysics, 2008, 487, 921-935.	5.1	132
97	Ultra-Compact Dwarf Galaxies â€“ More Massive than Allowed?. Proceedings of the International Astronomical Union, 2007, 3, 427-428.	0.0	4
98	A comprehensive set of simulations studying the influence of gas expulsion on star cluster evolution. Monthly Notices of the Royal Astronomical Society, 2007, 380, 1589-1598.	4.4	308
99	Dynamical masses of ultra-compact dwarf galaxies in Fornax. Astronomy and Astrophysics, 2007, 463, 119-130.	5.1	86
100	Star cluster disruption by giant molecular clouds. Monthly Notices of the Royal Astronomical Society, 2006, 371, 793-804.	4.4	211
101	Which Globular Clusters Contain Intermediate-Mass Black Holes?. Astrophysical Journal, 2005, 620, 238-243.	4.5	117
102	Formation of massive black holes through runaway collisions in dense young star clusters. Nature, 2004, 428, 724-726.	27.8	554
103	Massive Black Holes in Star Clusters. II. Realistic Cluster Models. Astrophysical Journal, 2004, 613, 1143-1156.	4.5	161
104	Massive Black Holes in Star Clusters. I. Equal-Mass Clusters. Astrophysical Journal, 2004, 613, 1133-1142.	4.5	109
105	The Dynamical Distance to M15: Estimates of the Cluster's Age and Mass and of the Absolute Magnitude of Its RR Lyrae Stars. Astrophysical Journal, 2004, 602, 264-270.	4.5	47
106	Dynamical evolution of star clusters in tidal fields. Monthly Notices of the Royal Astronomical Society, 2003, 340, 227-246.	4.4	588
107	Parameters of core collapse. Monthly Notices of the Royal Astronomical Society, 2003, 341, 247-250.	4.4	35
108	Dynamical Formation of Close Binary Systems in Globular Clusters. Astrophysical Journal, 2003, 591, L131-L134.	4.5	271

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109	A Dynamical Model for the Globular Cluster G1. <i>Astrophysical Journal</i> , 2003, 589, L25-L28.	4.5	137
110	On the Central Structure of M15. <i>Astrophysical Journal</i> , 2003, 582, L21-L24.	4.5	128
111	Long-term evolution of isolated N-body systems. <i>Monthly Notices of the Royal Astronomical Society</i> , 2002, 336, 1069-1081.	4.4	76
112	Scaling of N-body calculations. <i>Monthly Notices of the Royal Astronomical Society</i> , 2001, 325, 1323-1331.	4.4	141
113	Peculiarities in velocity dispersion and surface density profiles of star clusters. <i>Monthly Notices of the Royal Astronomical Society</i> , 0, 407, 2241-2260.	4.4	97
114	Direct N-body simulations of globular clusters â€“ III. PalomarÂ4 on an eccentric orbit. <i>Monthly Notices of the Royal Astronomical Society</i> , 0, , stx130.	4.4	8
115	First direct dynamical detection of a dual super-massive black hole system at sub-kpc separation. <i>Astronomy and Astrophysics</i> , 0, , .	5.1	6