Katrin Heitmann

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7883974/publications.pdf

Version: 2024-02-01

53	3,588	136950	189892
papers	citations	32 h-index	50 g-index

53	53	53	2414
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Farpoint: A High-resolution Cosmology Simulation at the Gigaparsec Scale. Astrophysical Journal, Supplement Series, 2022, 259, 15.	7.7	9
2	Why are we still using 3D masses for cluster cosmology?. Monthly Notices of the Royal Astronomical Society, 2022, 515, 3383-3405.	4.4	6
3	Machine learning synthetic spectra for probabilistic redshift estimation: SYTH-Z. Monthly Notices of the Royal Astronomical Society, 2022, 515, 1927-1941.	4.4	4
4	The Last Journey. I. An Extreme-scale Simulation on the Mira Supercomputer. Astrophysical Journal, Supplement Series, 2021, 252, 19.	7.7	12
5	The LSST DESC DC2 Simulated Sky Survey. Astrophysical Journal, Supplement Series, 2021, 253, 31.	7.7	32
6	The completed SDSS-IV extended Baryon Oscillation Spectroscopic Survey: N-body mock challenge for the eBOSS emission line galaxy sample. Monthly Notices of the Royal Astronomical Society, 2021, 504, 4667-4686.	4.4	22
7	The Last Journey. II. SMACCâ€”Subhalo Mass-loss Analysis Using Core Catalogs. Astrophysical Journal, 2021, 913, 109.	4.5	2
8	Matter power spectrum emulator for <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>f</mml:mi><mml:mo stretchy="false">(</mml:mo><mml:mi>R</mml:mi><mml:mo stretchy="false">)</mml:mo></mml:math> modified gravity cosmologies. Physical Review D, 2021, 103, .	4.7	19
9	The completed SDSS-IV extended Baryon Oscillation Spectroscopic Survey: N-body mock challenge for the quasar sample. Monthly Notices of the Royal Astronomical Society, 2020, 499, 269-291.	4.4	41
10	On the possibility of baryon acoustic oscillation measurements at redshift z > 7.6 with the Roman space telescope. Monthly Notices of the Royal Astronomical Society, 2020, 498, 4955-4970.	4.4	2
11	The Mira-Titan Universe. III. Emulation of the Halo Mass Function. Astrophysical Journal, 2020, 901, 5.	4.5	58
12	The Importance of Secondary Halos for Strong Lensing in Massive Galaxy Clusters across Redshift. Astrophysical Journal, 2019, 878, 122.	4.5	8
13	The Outer Rim Simulation: A Path to Many-core Supercomputers. Astrophysical Journal, Supplement Series, 2019, 245, 16.	7.7	67
14	The Borg Cube Simulation: Cosmological Hydrodynamics with CRK-SPH. Astrophysical Journal, 2019, 877, 85.	4.5	14
15	CosmoDC2: A Synthetic Sky Catalog for Dark Energy Science with LSST. Astrophysical Journal, Supplement Series, 2019, 245, 26.	7.7	67
16	HACC Cosmological Simulations: First Data Release. Astrophysical Journal, Supplement Series, 2019, 244, 17.	7.7	17
17	DESCQA: An Automated Validation Framework for Synthetic Sky Catalogs. Astrophysical Journal, Supplement Series, 2018, 234, 36.	7.7	18
18	The clustering of the SDSS-IV extended Baryon Oscillation Spectroscopic Survey DR14 quasar sample: anisotropic clustering analysis in configuration space. Monthly Notices of the Royal Astronomical Society, 2018, 480, 2521-2534.	4.4	61

#	Article	IF	Citations
19	The clustering of the SDSS-IV extended Baryon Oscillation Spectroscopic Survey DR14 quasar sample: measurement of the growth rate of structure from the anisotropic correlation function between redshift 0.8 and 2.2. Monthly Notices of the Royal Astronomical Society, 2018, 477, 1639-1663.	4.4	109
20	The clustering of the SDSS-IV extended Baryon Oscillation Spectroscopic Survey DR14 quasar sample: structure growth rate measurement from the anisotropic quasar power spectrum in the redshift range 0.8Â<ÂzÂ<Â2.2. Monthly Notices of the Royal Astronomical Society, 2018, 477, 1604-1638.	4.4	118
21	Halo Profiles and the Concentrationâ€“Mass Relation for a Î›CDM Universe. Astrophysical Journal, 2018, 859, 55.	4.5	83
22	The Mira-Titan Universe. II. Matter Power Spectrum Emulation. Astrophysical Journal, 2017, 847, 50.	4.5	98
23	Building Halo Merger Trees from the Q Continuum Simulation. , 2017, , .		2
24	SIMULATIONS OF THE PAIRWISE KINEMATIC SUNYAEVâ€“ZELâ€™DOVICH SIGNAL. Astrophysical Journal, 2016, 823, 98.	4.5	32
25	THE MIRAâ€“TITAN UNIVERSE: PRECISION PREDICTIONS FOR DARK ENERGY SURVEYS. Astrophysical Journal, 2016, 820, 108.	4.5	100
26	PICS: SIMULATIONS OF STRONG GRAVITATIONAL LENSING IN GALAXY CLUSTERS. Astrophysical Journal, 2016, 828, 54.	4.5	22
27	Redshift-space distortions in massive neutrino and evolving dark energy cosmologies. Physical Review D, 2016, 93, .	4.7	25
28	HACC: Simulating sky surveys on state-of-the-art supercomputing architectures. New Astronomy, 2016, 42, 49-65.	1.8	166
29	COSMIC EMULATION: FAST PREDICTIONS FOR THE GALAXY POWER SPECTRUM. Astrophysical Journal, 2015, 810, 35.	4.5	74
30	THE Q CONTINUUM SIMULATION: HARNESSING THE POWER OF GPU ACCELERATED SUPERCOMPUTERS. Astrophysical Journal, Supplement Series, 2015, 219, 34.	7.7	41
31	Large-scale structure formation with massive neutrinos and dynamical dark energy. Physical Review D, 2014, 89, .	4.7	36
32	THE COYOTE UNIVERSE EXTENDED: PRECISION EMULATION OF THE MATTER POWER SPECTRUM. Astrophysical Journal, 2014, 780, 111.	4.5	206
33	DARK MATTER HALO PROFILES OF MASSIVE CLUSTERS: THEORY VERSUS OBSERVATIONS. Astrophysical Journal, 2013, 766, 32.	4.5	185
34	COSMIC EMULATION: THE CONCENTRATION-MASS RELATION FORwCDM UNIVERSES. Astrophysical Journal, 2013, 768, 123.	4.5	44
35	Visualization of multivariate dark matter halos in cosmology simulations. , 2013, , .		4
36	Cosmic web, multistream flows, and tessellations. Physical Review D, 2012, 85, .	4.7	104

#	Article	IF	Citations
37	Nonparametric reconstruction of the dark energy equation of state from diverse data sets. Physical Review D, 2011, 84, .	4.7	67
38	MASS FUNCTION PREDICTIONS BEYOND Î›CDM. Astrophysical Journal, 2011, 732, 122.	4.5	164
39	ANALYZING AND VISUALIZING COSMOLOGICAL SIMULATIONS WITH ParaView. Astrophysical Journal, Supplement Series, 2011, 195, 11.	7.7	21
40	THE COYOTE UNIVERSE. I. PRECISION DETERMINATION OF THE NONLINEAR MATTER POWER SPECTRUM. Astrophysical Journal, 2010, 715, 104-121.	4.5	261
41	THE COYOTE UNIVERSE. III. SIMULATION SUITE AND PRECISION EMULATOR FOR THE NONLINEAR MATTER POWER SPECTRUM. Astrophysical Journal, 2010, 713, 1322-1331.	4.5	179
42	The Accelerated Universe. Computing in Science and Engineering, 2010, 12, 17-25.	1.2	21
43	THE COYOTE UNIVERSE. II. COSMOLOGICAL MODELS AND PRECISION EMULATION OF THE NONLINEAR MATTER POWER SPECTRUM. Astrophysical Journal, 2009, 705, 156-174.	4.5	211
44	THE STRUCTURE OF HALOS: IMPLICATIONS FOR GROUP AND CLUSTER COSMOLOGY. Astrophysical Journal, 2009, 692, 217-228.	4.5	82
45	Hybrid petacomputing meets cosmology: The Roadrunner Universe project. Journal of Physics: Conference Series, 2009, 180, 012019.	0.4	33
46	Simulations and cosmological inference: A statistical model for power spectra means and covariances. Physical Review D, 2008, 78, .	4.7	24
47	The cosmic code comparison project. Computational Science & Discovery, 2008, 1, 015003.	1.5	99
48	The Halo Mass Function: Highâ€Redshift Evolution and Universality. Astrophysical Journal, 2007, 671, 1160-1181.	4.5	184
49	Cosmic calibration: Constraints from the matter power spectrum and the cosmic microwave background. Physical Review D, 2007, 76, .	4.7	92
50	Cosmic Calibration. Astrophysical Journal, 2006, 646, L1-L4.	4.5	73
51	Capturing Halos at High Redshifts. Astrophysical Journal, 2006, 642, L85-L88.	4.5	42
52	Robustness of Cosmological Simulations. I. Largeâ€Scale Structure. Astrophysical Journal, Supplement Series, 2005, 160, 28-58.	7.7	108
53	The Completed SDSS-IV Extended Baryon Oscillation Spectroscopic Survey: N-body Mock Challenge for Galaxy Clustering Measurements. Monthly Notices of the Royal Astronomical Society, 0, , .	4.4	19