Possible Papers for Journal Club 2012-2016

Not Yet Discussed

arXiv:1612.09582
Perspective on MOND emergence from Verlinde's "emergent gravity" and its recent test by weak lensing
Mordehai Milgrom, Robert H. Sanders

arXiv:1612.07406
Causality Implies Inflationary Back-Reaction
S. Basu, N.C. Tsamis, R.P. Woodard

arXiv:1612.04824
Geometric Baryogenesis from Shift Symmetry
Andrea De Simone, Takeshi Kobayashi, Stefano Liberati

arXiv:1612.03726
How does the cosmic large-scale structure bias the Hubble diagram?
Pierre Fleury, Chris Clarkson, Roy Maartens

arXiv:1612.03157
No fifth force in a scale invariant universe
Pedro G. Ferreira, Christopher T. Hill, Graham G. Ross

arXiv:1612.02833
Halo assembly bias from Separate Universe simulations
Aseem Paranjape, Nikhil Padmanabhan

arXiv:1612.02454
Separate Universes beyond General Relativity
Wayne Hu, Austin Joyce

arXiv:1612.01529
The tangential velocity excess of the Milky Way satellites
Marius Cautun, Carlos S. Frenk

arXiv:1612.00353
Time in quantum cosmology
Martin Bojowald, Theodore Halnon

arXiv:1611.09781
Intrinsic Conformal Symmetries in Szekeres models
Pantelis S. Apostolopoulos

arXiv:1611.09348
On the complexity and the information content of cosmic structures
Franco Vazza

arXiv:1611.08606
Lensing is Low: Cosmology, Galaxy Formation, or New Physics?
A. Leauthaud, et al,

arXiv:1611.07915
The many scales to cosmic homogeneity: Use of multiple tracers from the SDSS
Prakash Sarkar, Subhabrata Majumdar, Biswajit Pandey, Atul Kedia, Suman Sarkar

arXiv:1611.04569
Szekeres models: a covariant approach
Pantelis S. Apostolopoulos

arXiv:1610.09424
Initial conditions for cosmological perturbations
Abhay Ashtekar, Brajesh Gupt

arXiv:1610.08882
Cosmology on all scales: a two-parameter perturbation expansion
Sophia R. Goldberg, Timothy Clifton, Karim A. Malik

arXiv:1610.08176
Probing statistical isotropy of cosmological radio sources using SKA
Shamik Ghosh, Pankaj Jain, Gopal Kashyap, Rahul Kothari, Sharvari Nadkarni-Ghosh, Prabhakar Tiwari

arXiv:1610.07695
The need for accurate redshifts in supernova cosmology
Josh Calcino, Tamara Davis

arXiv:1610.06215
Density-dependent clustering: I. Pulling back the curtains on motions of the BAO peak
Mark C. Neyrinck, István Szapudi, Nuala McCullagh, Alex Szalay, Bridget Falck, Jie Wang

arXiv:1610.05943
Two fundamental cosmological laws of the Local Universe
Yurij V. Baryshev

arXiv:1610.03351
A general relativistic signature in the galaxy bispectrum
Obinna Umeh, Sheean Jolicoeur, Roy Maartens, Chris Clarkson

arXiv:1610.02951
Conformal mapping of the Misner-Sharp mass from gravitational collapse
Fayçal Hammad

arXiv:1610.01968
Four principles for quantum gravity
Lee Smolin

arXiv:1610.01059
Large-Scale Tides in General Relativity
Hiu Yan Ip, Fabian Schmidt

arXiv:1610.00037
Imprint of DES super-structures on the Cosmic Microwave Background
A. Kovács, et al (DES collaboration)

arXiv:16109.00015
Beyond the Boost: Measuring the intrinsic dipole of the CMB using the spectral distortions of the monopole and quadrupole
Siavash Yasini, Elena Pierpaoli

arXiv:1609.08247
Cosmological Forecasts for Combined and Next Generation Peculiar Velocity Surveys
Cullan Howlett, Lister Staveley-Smith, Chris Blake

arXiv:1609.01747
What galaxy masses perturb the local cosmic expansion?
Jorge Peñarrubia, Azadeh Fattahi

arXiv:1609.03724
Cosmic backreaction and Gauss's law
Pierre Fleury

arXiv:1609.03576
Performance study of Lagrangian methods: reconstruction of large scale peculiar velocities and baryonic acoustic oscillations
Ariel Keselman, Adi Nusser

arXiv:1609.02776
Multiscale spacetimes from first principles
Gianluca Calcagni

arXiv:1609.01205
New thresholds for Primordial Black Hole formation during the QCD phase transition
J. L. G. Sobrinho, P. Augusto and A. L. Goncalves

arXiv:1608.05516
A quantum bound on the thermodynamic description of gravity
Shahar Hod

arXiv:1608.01422
Turning around along the cosmic web
Jounghun Lee, Gustavo Yepes

arXiv:1607.08661
Einstein's equations from Einstein's inertial motion and Newton's law for relative acceleration
Christoph Schmid

arXiv:1607.07589
Cosmology without time: What to do with a possible signature change from quantum gravitational origin?
Aurélien Barrau, Julien Grain

arXiv:1607.06944
Satellite Test of the Equivalence Principle as a Probe of Modified Newtonian Dynamics
Jonas P. Pereira, James M. Overduin, Alexander J. Poyneer

arXiv:1607.06098
Constraining the Baryon-Dark Matter Relative Velocity with the Large-Scale 3-Point Correlation Function of the SDSS BOSS DR12 CMASS Galaxies
Z Slepian et al

arXiv:1607.06097
Detection of Baryon Acoustic Oscillation Features in the Large-Scale 3-Point Correlation Function of SDSS BOSS DR12 CMASS Galaxies
Z Slepian et al

arXiv:1607.05617
The trouble with H0
Jose Luis Bernal, Licia Verde, Adam G. Riess

arXiv:1607.05297
The length of the low-redshift standard ruler
Licia Verde, Jose Luis Bernal, Alan F. Heavens, Raul Jimenez

arXiv:1607.05226
Lagrangian theory for cosmic structure formation with vorticity: Newtonian and post-Friedmann approximation
Cornelius Rampf, Eleonora Villa, Daniele Bertacca, Marco Bruni

arXiv:1607.05103
Universal MOND relation between the baryonic and `dynamical' central surface densities of disc galaxies
Mordehai Milgrom

arXiv:1607.03900
The primordial deuterium abundance of the most metal-poor damped Lyman-alpha system
Ryan Cooke, Max Pettini, Kenneth M. Nollett, Regina Jorgenson

arXiv:1607.02460
Relationalism Evolves the Universe Through the Big Bang
Tim A Koslowski, Flavio Mercati, David Sloan

arXiv:1607.00775
The Magnetic Part of the Weyl Tensor, and the Expansion of Discrete Universes
Timothy Clifton, Daniele Gregoris, Kjell Rosquist

arXiv:1606.06758
Model-independent test of the FLRW metric, the flatness of the Universe and non-local measurement of H_0
Benjamin L'Huillier, Arman Shafieloo

arXiv:1606.06758
Comparing cosmic web classifiers using information theory
Florent Leclercq, Guilhem Lavaux, Jens Jasche, Benjamin Wandelt

arXiv:1606.03114
The Alcock Paczyski test with Baryon Acoustic Oscillations: systematic effects for future surveys
Francesca Lepori, Enea Di Dio, Matteo Viel, Carlo Baccigalupi, Ruth Durrer

arXiv:1606.02677
The role of conformal symmetry in gravity and the standard model
Stefano Lucat, Tomislav Prokopec

arXiv:1606.01215
Self-gravitating fluid solutions of Shape Dynamics
Daniel C. Guariento, Flavio Mercati

arXiv:1606.00439
The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: RSD measurement from the power spectrum and bispectrum of the DR12 BOSS galaxies
Héctor Gil-Marín, Will J. Percival, Licia Verde, Joel R. Brownstein, Chia-Hsun Chuang, Francisco-Shu Kitaura, Sergio A. Rodríguez-Torres, Matthew D. Olmstead

arXiv:1605.08650
Isentropic Spheres in General Relativity
Mayer Humi, John Roumas

arXiv:1605.06617
Global and Local Horizon Quantum Mechanics
R. Casadio, A. Giugno, A. Giusti

arXiv:1605.05155
Critical points of the cosmic velocity and the uncertainties in the value of the Hubble constant
Hao Liu, Roya Mohayaee, Pavel Naselsky

arXiv:1605.00486
Calibrating High Redshift Ia Supernovae using the Distance Duality Relation
Jarah Evslin

arXiv:1605.00231
Conformal and projective symmetries in Newtonian cosmology
Christian Duval, Gary Gibbons, Peter Horvathy

arXiv:1604.08899
Theoretical Aspects of Cosmic Acceleration
Mark Trodden

arXiv:1604.06947
What are Omh^2 (z _1 ,z _2) and Om(z _1 ,z _2) diagnostics telling us in light of H (z) data?
Xiaogang Zheng, Xuheng Ding, Marek Biesiada, Shuo Cao, Zonghong Zhu

arXiv:1604.06947
Relative information entropy in cosmology: The problem of information entanglement
Viktor G. Czinner, Filipe C. Mena

arXiv:1604.05321
Effect of observational holes and borders on lacunarity and fractality measurements in a galaxy catalogue
Jorge E. García-Farieta, Rigoberto A. Casas-Miranda

arXiv:1604.03543
On the time delay between ultrarelativistic particles
Pierre Fleury

arXiv:1603.05449
Limits of time in cosmology
Svend E. Rugh and Henrik Zinkernagel

arXiv:1603.05184
Redshift-space distortions around voids
Yan-Chuan Cai, Andy Taylor, John A. Peacock, Nelson Padilla

arXiv:1603.02679
The Local Group: The Ultimate Deep Field
Michael Boylan-Kolchin, Daniel R. Weisz, James S. Bullock, Michael C. Cooper

arXiv:1603.02664
Interpreting the CMB aberration and Doppler measurements: boost or intrinsic dipole?
Omar Roldan, Alessio Notari, Miguel Quartin

arXiv:1603.00501
Probing Neutrino Mass Hierarchy by Comparing the Charged-Current and Neutral-Current Interaction Rates of Supernova Neutrinos
Luis Lehner, Steven L. Liebling, Carlos Palenzuela, O. L. Caballero, Evan O'Connor, Matthew Anderson, David Neilsen

arXiv:1603.00951
Stochastic Einstein equations with fluctuating volume
Vladimir Dzhunushaliev and Hernando Quevedo

arXiv:1602.08541
Voids in cosmological simulations over cosmic time
Radosaw Wojtak, Devon Powell, Tom Abel

arXiv:1602.02103
First evidence of running cosmic vacuum: challenging the concordance model
Joan Sola, Adria Gomez-Valent, Javier de Cruz Perez

arXiv:1602.07699
General relativistic 'screening' in cosmological simulations
Oliver Hahn, Aseem Paranjape

arXiv:1601.01701
A 6% measurement of the Hubble parameter at z 0.45 : direct evidence of the epoch of cosmic re-acceleration
Michele Moresco, Lucia Pozzetti, Andrea Cimatti, Raul Jimenez, Claudia Maraston, Licia Verde, Daniel Thomas, Annalisa Citro, Rita Tojeiro, David Wilkinson

arXiv:1512.08489
Time of flight of ultra-relativistic particles in a realistic Universe: a viable tool for fundamental physics?
G. Fanizza, M. Gasperini, G. Marozzi, G. Veneziano

arXiv:1512.05729
Buchert coarse-graining and the classical energy conditions
Matt Visser

arXiv:1512.05624
Redshift drift in an inhomogeneous universe: averaging and the backreaction conjecture
S.M. Koksbang, S. Hannestad

arXiv:1512.05624
Beyond CDM: Problems, solutions, and the road ahead
Philip Bull, Yashar Akrami, et al.

arXiv:1512.02932
Gravitational-wave implications for structure formation: a second-order approach
Despoina Pazouli, Christos G. Tsagas

arXiv:1511.08663
Quasi-local approach to general universal horizons
Alan Maciel

arXiv:1511.06930
The 6dF Galaxy Survey: Bulk Flows on 5070 /h Mpc scales
Morag I. Scrimgeour, Tamara M. Davis, Chris Blake, Lister Staveley-Smith, Christina Magoulas, Christopher M. Springob, Florian Beutler, Matthew Colless, Andrew Johnson, D. Heath Jones, Jun Koda, John R. Lucey, Yin-Zhe Ma, Jeremy Mould, Gregory B. Poole

arXiv:1511.05856
The matter distribution in the local universe as derived from galaxy groups in SDSS DR12 and 2MRS
Christoph Saulder, Eelco van Kampen, Steffen Mieske, Werner W. Zeilinger

arXiv:1511.04849
2MTF V. Cosmography, Beta, and the residual bulk flow
Christopher M. Springob, Tao Hong, Lister Staveley-Smith, Karen L. Masters, Lucas M. Macri, Baerbel S. Koribalski, D. Heath Jones, Tom H. Jarrett, Christina Magoulas, Pirin Erdogdu

arXiv:1511.04405
Signatures of the primordial Universe from its emptiness
Francisco-Shu Kitaura, Chia-Hsun Chuang, Yu Liang, Cheng Zhao, Charling Tao, Sergio Rodriguez-Torres, Daniel J. Eisenstein, Hector Gil-Marin, Jean-Paul Kneib, Cameron McBride, Will Percival, Ashley J. Ross, Ariel G. Sanchez, Jeremy Tinker, Rita Tojeiro, Mariana Vargas-Magana, Gong-Bo Zhao

arXiv:1511.04391
Measuring Baryon Acoustic Oscillations from the clustering of voids
Yu Liang, Cheng Zhao, Chia-Hsun Chuang, Francisco-Shu Kitaura, Charling Tao

arXiv:1511.03320
Cosmological perturbation theory with York time
Philipp Roser

arXiv:1511.01106
Integration of inhomogeneous cosmological spacetimes in the BSSN formalism
John T. Giblin, James B. Mertens, Glenn D. Starkman

arXiv:1511.01105
Departures from the FLRW Cosmological Model in an Inhomogeneous Universe: A Numerical Examination
John T. Giblin, James B. Mertens, Glenn D. Starkman

arXiv:1511.00055
Quantifying discordance in the 2015 Planck CMB spectrum
G. E. Addison, Y. Huang, D. J. Watts, C. L. Bennett, M. Halpern, G. Hinshaw and J. L. Weiland

arXiv:1510.08060
On the persistence of two small-scale problems in CDM
Marcel S. Pawlowski, Benoit Famaey, David Merritt, Pavel Kroupa

arXiv:1510.06442
Evidence for the kinematic Sunyaev-Zedovich effect with ACTPol and velocity reconstruction from BOSS
E. Schaan et al

arXiv:1510.05545
Constraining the local variance of H0 from directional analyses
C.A.P. Bengaly

arXiv:1510.03789
Is the Hawking quasilocal energy "Newtonian"?
Valerio Faraoni

arXiv:1509.06736
Litmus Test for Cosmic Hemispherical Asymmetry in the CMB B-mode polarization
Suvodip Mukherjee, Tarun Souradeep

arXiv:1509.06371
The clustering of galaxies in the SDSS-III Baryon Oscillation Spectroscopic Survey: Baryon Acoustic Oscillations in the correlation function of LOWZ and CMASS galaxies in Data Release 12
Antonio J. Cuesta et al.

arXiv:1509.06316
Blueshifting may explain the gamma ray bursts
Andrzej Krasiski

arXiv:1509.05374
Kinematic dipole detection with galaxy surveys: forecasts and requirements
Mijin Yoon, Dragan Huterer

arXiv:1509.04430
Spectral Properties of Galaxies in Void Regions
Chenxu Liu, Danny Pan, Lei Hao, Fiona Hoyle, Anca Constantin, Micheal S. Vogeley

arXiv:1509.04342
Relationship between the CMB, SZ Cluster Counts, and Local Hubble Parameter Measurements in a Simple Void Model
Kiyotomo Ichiki, Chul-Moon Yoo, Masamune Oguri

arXiv:1509.03835
First-order cosmological perturbations engendered by point-like masses: all scales covered
Maxim Eingorn

arXiv:1509.02532
Revisiting the NVSS number count dipole
Prabhakar Tiwari, Adi Nusser

arXiv:1509.01699
General relativity and cosmic structure formation
Antonio Enea Romano, Daniel Cornejo, Luis E. Campusano

arXiv:1509.00010
The view from the boundary: a new void stacking method
Marius Cautun, Yan-Chuan Cai, Carlos S. Frenk

arXiv:1509.01879
Detection of a new large angular CMB anomaly and its alignment with cosmic structure
Julian Adamek, David Daverio, Ruth Durrer, Martin Kunz

arXiv:1508.07903
The theory of stochastic cosmological lensing
Pierre Fleury, Julien Larena, Jean-Philippe Uzan

arXiv:1508.07491
Galactic mapping with general relativity and the observed rotation curves
Nadja S. Magalhaes, Fred I. Cooperstock

arXiv:1508.06704
Parity Horizons, Black Holes, and Chronology Protection in Shape Dynamics
Gabriel Herczeg

arXiv:1508.06286
Distribution function of the Atoms of Spacetime and the Nature of Gravity
T. Padmanabhan

arXiv:1508.03127
Multiple non-spherical structures from the extrema of Szekeres scalars
Roberto A. Sussman, Ismael Delgado Gaspar

arXiv:1508.01510
Cosmic Acceleration as an Optical Illusion
Harald Skarke

arXiv:1508.01289
Isolated dSph galaxy KKs3 in the local Hubble flow
I.D. Karachentsev, A.Yu. Kniazev, M.E. Sharina

arXiv:1507.07447
Probing the isotropy of cosmic acceleration traced by Type Ia supernovae
Behnam Javanmardi, Cristiano Porciani, Pavel Kroupa, Jan Pflamm-Altenburg

arXiv:1507.07447
Spacelike spherically symmetric CMC foliation in the extended Schwarzschild spacetime
Kuo-Wei Lee, Yng-Ing Lee

arXiv:1507.07300
Gravitational Energy for GR and Poincare Gauge Theories: a Covariant Hamiltonian Approach
Chiang-Mei Chen, James M. Nester, Roh-Suan Tung

arXiv:1507.06498
Entropy and the Typicality of Universes
Julian Barbour, Tim Koslowski, Flavio Mercati

arXiv:1507.03124
Dipole Modulation of Cosmic Microwave Background Temperature and Polarization
Shamik Ghosh, Rahul Kothari, Pankaj Jain, Pranati K. Rath

arXiv:1507.03124
Testing homogeneity in the Sloan Digital Sky Survey Data Release Twelve with Shannon entropy
Biswajit Pandey, Suman Sarkar

arXiv:1507.02306
Realistic coarse-grained cosmic structure from Szekeres models
Roberto A. Sussman and I. Delgado Gaspar

arXiv:1507.02160
The angular two-point correlation of NVSS galaxies revisited
Song Chen, Dominik J. Schwarz

arXiv:1507.00197
The nature of voids: II. Tracing underdensities with biased galaxies
Seshadri Nadathur, Shaun Hotchkiss

arXiv:1506.09143
Inflation, evidence and falsifiability
Giulia Gubitosi, Macarena Lagos, Joao Magueijo, Rupert Allison

arXiv:1506.07135
Planck 2015 results. XVI. Isotropy and statistics of the CMB
P.A.R. Ade et al, Planck Collaboration

arXiv:1506.05873
The Trajectory of the Cosmic Plasma Through the Quark Matter Phase Diagram
Brett McInnes

arXiv:1506.04609
Combined constraints on deviations of dark energy from an ideal fluid from Euclid and Planck
Elisabetta Majerotto, Domenico Sapone, Bjoern Malte Schaefer

arXiv:1506.04405
Microwave Background Correlations from Dipole Anisotropy Modulation
Simone Aiola, Bingjie Wang, Arthur Kosowsky, Tina Kahniashvili, Hassan Firouzjahili

arXiv:1506.04587
The Luminous Convolution Model for spiral galaxy rotation curves
S. Cisneros, J.G. O'Brien, N.S. Oblath, J.A. Formaggio

arXiv:1506.04009
A universal velocity dispersion profile for pressure supported systems: evidence for MONDian gravity across 12 orders of magnitude in mass
X. Hernandez, R. Durazo, B. Cervantes-Sodi, H. J. Ibarra-Medel, O. Lopez-Cruz

arXiv:1506.02003
A new approach to the propagation of light-like signals in perturbed cosmological backgrounds
G. Fanizza, M. Gasperini, G. Marozzi, G. Veneziano

arXiv:1506.00384
The difficulty of measuring the local dark matter density
Frederic V. Hessman

arXiv:1506.00550
A novel approach to reconstructing signals of isotropy violation from a masked CMB sky
Pavan K. Aluri, Nidhi Pant, Aditya Rotti, Tarun Souradeep

arXiv:1505.06028
Spectral distortions of the CMB dipole
S.A. Balashev, E.E. Kholupenko, J. Chluba, A.V. Ivanchik, D.A. Varshalovich

arXiv:1504.05578
On the Physical Origin of Galactic Conformity
Andrew P. Hearin, Peter S. Behroozi, Frank C. van den Bosch

arXiv:1504.04627
Cosmological parameters from the comparison of peculiar velocities with predictions from the 2M++ density field
Jonathan Carrick, Stephen J. Turnbull, Guilhem Lavaux, Michael J. Hudson

arXiv:1504.04366
Equivalence Principle and the Baryon Acoustic Peak
Tobias Baldauf, Mehrdad Mirbabayi, Marko Simonovi, Matias Zaldarriaga

arXiv:1504.04011
Constraints on the missing baryons from the kinetic Sunyaev-Zeldovich effect in Planck data
Carlos Hernández-Monteagudo, Yin-zhe Ma, Francisco-Shu Kitaura, Wenting Wang, Ricardo Génova-Santos, Juan Macías-Pérez, Diego Herranz

arXiv:1504.03653
Probing the integrated Sachs-Wolfe effect using embedded lens models
Bin Chen, Ronald Kantowski

arXiv:1504.03027
Modified Gravity and Large Scale Flows
Jeremy Mould, Matthew Colless, Tamara Davis, Pirin Erdogdu, Heath Jones, John Lucey, Yin-Zhe Ma, Christina Magoulas and Chris Springob

arXiv:1504.02076
On the proper kinetic quadrupole CMB removal and the quadrupole anomalies
Alessio Notari, Miguel Quartin

arXiv:1504.00351
On Separate Universes
Liang Dai, Enrico Pajer, Fabian Schmidt

arXiv:1503.08506
On the Bias of the Distance-Redshift Relation from Gravitational Lensing
Nick Kaiser, John A. Peacock

arXiv:1503.02566
Lagrangian theory of structure formation in relativistic cosmology III: gravitoelectric perturbation and solution schemes at any order
Alexandre Alles, Thomas Buchert, Fosca Al Roumi, Alexander Wiegand

arXiv:1502.02011
Conformal Fermi Coordinates
Liang Dai, Enrico Pajer and Fabian Schmidt

arXiv:1502.04320
Hypothesis on the Nature of Time
D.N. Coumbe

arXiv:1501.07064
The radial velocity profile of the filament galaxies in the vicinity of the Virgo cluster as a test of gravity
Jounghun Lee, Suk Kim, Soo-Chang Rey

arXiv:1501.04906
Cosmological evolution of the gravitational entropy of the large-scale structure
Giovanni Marozzi, Jean-Philippe Uzan, Obinna Umeh, Chris Clarkson

arXiv:1501.03119
Constraints and tensions in testing general relativity from Planck and CFHTLenS including intrinsic alignment systematicc
Jason N. Dossett, Mustapha Ishak, David Parkinson, Tamara Davis

arXiv:1412.8404
On spherical dust fluctuations: the exact vs. the perturbative approach
Roberto A. Sussman, Juan Carlos Hidalgo, Peter K. S. Dunsby, Gabriel German

arXiv:1412.7310
Cosmic flows and the expansion of the Local Universe from nonlinear phase-space reconstructions
Steffen Hess, Francisco-Shu Kitaura

arXiv:1412.7208
Averaging in LRS class II spacetimes
Petr Kaspar, Otakar Svitek

arXiv:1412.6832
Modified Newtonian potentials for particles and fluids in permanent rotation around black holes
V. Karas, M. A. Abramowicz

arXiv:1412.5472
Entanglement density and gravitational thermodynamics
Jyotirmoy Bhattacharya, Veronika E. Hubeny, Mukund Rangamani, Tadashi Takayanagi

arXiv:1412.5151
Homogeneity and isotropy in the 2MASS Photometric Redshift catalogueu
David Alonso, Ana Isabel Salvador, Francisco Javier Sanchez, Maciej Bilicki, Juan Garcia-Bellido, Eusebio Sanchez

arXiv:1412.5115
Quasilocal conformal Killing horizons: Classical phase space and the first law
Ayan Chatterjee, Avirup Ghosh

arXiv:1412.4976
A new test of the FLRW metric using distance sum rule
Syksy Rasanen, Krzysztof Bolejko and Alexis Finoguenov

arXiv:1412.4344
Cosmological variation of the MOND constant: secular effects on galactic systems
Mordehai Milgrom

arXiv:1412.3865
Nonlinear effects of general relativity from multiscale structure
MikolaijKorzynski

arXiv:1412.3808 **[Phys. Lett. B 379 (2014) 383]**
Self-gravitating field configurations: The role of the energy-momentum trace
Shahar Hod

arXiv:1411.6339
On the perturbation of the luminosity distance by peculiar motions
Nick Kaiser and Michael J. Hudson

arXiv:1411.4368
Kullback-Leibler entropy and Penrose conjecture in the Lemaitre-Tolman-Bondi model
Xiao-Long Li, Shu-Peng Song, Nan Li

arXiv:1411.4180
Probing the Dark Flow signal in WMAP 9 yr and PLANCK cosmic microwave background maps
Xin Wang, Alex Szalay

arXiv:1411.4117
On the Nonlinear Evolution of Cosmic Web: Lagrangian Dynamics Revisited
Fernando Atrio-Barandela, Alexander Kashlinsky, Harald Ebeling, Dale J. Fixsen and Dale Kocevski

arXiv:1411.3718
Eppur si muove: Positional and kinematic correlations of satellite pairs in the low Z universe
Rodrigo A. Ibata, Benoit Famaey, Geraint F. Lewis, Neil G. Ibata, Nicolas Martin

arXiv:1411.1511
Galaxy Groups
R. Brent Tully

arXiv:1411.1094
Calibrating the cosmic distance scale ladder: the role of the sound horizon scale and the local expansion rate as distance anchors
Antonio J. Cuesta, Licia Verde, Adam Riess, Raul Jimenez

arXiv:1410.6480
Gauge-invariant average of Einstein equations for finite volumes
Juri Smirnov

arXiv:1410.5562
Probing bulk flow with nearby SNe Ia data
Stephen Appleby, Arman Shafieloo, Andrew Johnson

arXiv:1410.4751
The Persistent Percolation of Single-Stream Voids
Bridget Falck, Mark C. Neyrinck

arXiv:1410.4608
An integrated Sachs-Wolfe effect vs redshift test for the cosmological parameters
Ronald Kantowski, Bin Chen, Xinyu Dai

arXiv:1410.4559
Two new methods to detect cosmic voids without density measurements
Andrii Elyiv, Federico Marulli, Giorgia Pollina, Marco Baldi, Enzo Branchini, Andrea Cimatti, Lauro Moscardini

arXiv:1410.2172
The extended ROSAT-ESO Flux-Limited X-ray Galaxy Cluster Survey (REFLEX II) V. Exploring a local underdensity in the Southern Sky
Hans Boehringer, Gayoung Chon, Martyn Bristow, Chris A. Collins

arXiv:1409.6217
Standard rulers, candles, and clocks from the low-redshift Universe
Alan Heavens, Raul Jimenez, Licia Verde

arXiv:1409.5377
Blueshifts in the Lemaître - Tolman models
Andrzej Krasinski

arXiv:1409.3816
Asymptotics with a positive cosmological constant: I. Basic framework
Abhay Ashtekar, Beatrice Bonga, Aruna Kesavan

arXiv:1409.3580
Testing cosmic geometry without dynamic distortions using voids
Nico Hamaus, P. M. Sutter, Guilhem Lavaux, Benjamin D. Wandelt

arXiv:1409.1837
Back-reaction of the Hawking radiation flux on a gravitationally collapsing star II: Fireworks instead of firewalls
Laura Mersini-Houghton, Harald P. Pfeiffer

arXiv:1409.0880 **[Nature 513, 71 (2014)]**
The Laniakea supercluster of galaxies
R. Brent Tully, Helene Courtois, Yehuda Hoffman, Daniel Pomarède

arXiv:1408.5792
On the significance of power asymmetries in Planck CMB data at all scales
Miguel Quartin, Alessio Notari

arXiv:1408.5435
Tests of streaming models for redshift-space distortions
Martin White, Beth Reid, Chia-Hsun Chuang, Jeremy L. Tinker, Cameron K. McBride, Francisco Prada, Lado Samushia

arXiv:1408.5137
Proper-Time Hypersurface of Non-Relativistic Matter Flows: Galaxy Bias in General Relativity
Jaiyul Yoo

arXiv:1408.4720
Can a supervoid explain the Cold Spot?
Seshadri Nadathur, Mikko Lavinto, Shaun Hotchkiss and Syksy Rasanen

arXiv:1408.3166
The Local Group in the cosmic web
Jaime E. Forero-Romero, Roberto E. Gonzalez

arXiv:1408.2741
Can small scale structure ever affect cosmological dynamics?
Julian Adamek, Chris Clarkson, Ruth Durrer, Martin Kunz

arXiv:1408.2691
Time remains
Sean Gryb, Karim Thebault

arXiv:1407.7423
The Evolving Block Universe and the Meshing Together of Times
George F R Ellis

arXiv:1407.6940
Large-scale Cosmic Flows from Cosmicflows-2 Catalog
Richard Watkins, Hume A. Feldman

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