

Publications in refereed journals

12. **“Cosmological Ohm’s law and dynamics of non-minimal electromagnetism”**
Lukas Hollenstein, Rajeev Kumar Jain and Federico R. Urban
JCAP 1301 (2013) 013 [arXiv:1208.6547 [astro-ph.CO]].
11. **“Nonlinear cosmological consistency relations and effective matter stresses”**
Guillermo Ballesteros, Lukas Hollenstein, Rajeev Kumar Jain and Martin Kunz
JCAP 1205 (2012) 038 [arXiv:1112.4837 [astro-ph.CO]].
10. **“Zero-point quantum fluctuations in cosmology”**
Lukas Hollenstein, Maud Jaccard, Michele Maggiore and Ermis Mitsou
Phys. Rev. D 85 (2012) 124031 [arXiv:1111.5575 [astro-ph.CO]].
9. **“Resonant magnetic fields from inflation”**
Christian T. Byrnes, Lukas Hollenstein, Rajeev Kumar Jain and Federico R. Urban
JCAP 1203 (2012) 009 [arXiv:1111.2030 [astro-ph.CO]].
8. **“Early dark energy from zero-point quantum fluctuations”**
Michele Maggiore, Lukas Hollenstein, Maud Jaccard and Ermis Mitsou
Phys. Lett. B 704 (2011) 102 [arXiv:1104.3797 [astro-ph.CO]].
7. **“Can slow roll inflation induce relevant helical magnetic fields?”**
Ruth Durrer, Lukas Hollenstein and Rajeev Kumar Jain
JCAP 03 (2011) 037 [arXiv:1005.5322 [astro-ph.CO]].
6. **“Theoretical Priors On Modified Growth Parametrisations”**
Yong-Seon Song, Lukas Hollenstein, Gabriela Caldera-Cabral and Kazuya Koyama
JCAP 04 (2010) 018 [arXiv:1001.0969 [astro-ph.CO]].
5. **“Constraints on early dark energy from CMB lensing and weak lensing tomography”**
Lukas Hollenstein, Domenico Sapone, Robert Crittenden and Björn M. Schäfer
JCAP 04 (2009) 012 [arXiv:0902.1494 [astro-ph.CO]].
4. **“Exact solutions of $f(R)$ gravity coupled to nonlinear electrodynamics”**
Lukas Hollenstein and Francisco S. N. Lobo
Phys. Rev. D 78 (2008) 124007 [arXiv:0807.2325 [gr-qc]].
3. **“Challenges for creating magnetic fields by cosmic defects”**
Lukas Hollenstein, Chiara Caprini, Robert Crittenden and Roy Maartens
Phys. Rev. D 77 (2008) 063517 [arXiv:0712.1667 [astro-ph]].
2. **“Stability of the Einstein static universe in $f(R)$ gravity”**
Christian G. Boehmer, Lukas Hollenstein and Francisco S. N. Lobo
Phys. Rev. D 76 (2007) 084005 [arXiv:0706.1663 [gr-qc]].
1. **“Dark matter distribution function from non-extensive statistical mechanics”**
Steen H. Hansen, Daniel Egli, Lukas Hollenstein and Christophe Salzmann
New Astron. 10 (2005) 379 [arXiv:astro-ph/0407111].

Submitted articles

- **“Cosmology and fundamental physics with the Euclid satellite”**
Luca Amendola for the Euclid Theory Working Group
Submitted to Living Reviews [arXiv:1206.1225 [astro-ph.CO]].

Articles in conference proceedings

- **“Generation of helical magnetic fields from inflation”**

Rajeev K. Jain, Ruth Durrer and Lukas Hollenstein

Proceedings of the International Conference on Gravitation and Cosmology (ICGC), Goa, India (2011) [arXiv:1204.2409 [astro-ph.CO]].

- **“Stability of the Einstein static universe in modified theories of gravity”**

Christian G. Boehmer, Lukas Hollenstein, Francisco S. N. Lobo and Sanjeev S. Seahra

Proceedings of the Twelfth Marcel Grossmann Meeting on General Relativity, edited by T. Damour, R. T. Jantzen and R. Ruffini, World Scientific, Singapore (2010) [arXiv:1001.1266 [gr-qc]].

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