

ALIREZA HOJJATI

Publication List

In progress:

1. **A. Hojjati** et al.,
Searching for Scalar Gravitational Interactions in Current and Future Cosmological Data
2. **A. Hojjati** et al.,
Cross-correlation of Planck tSZ and RCSLenS Galaxy Weak Lensing Maps: Implications for ICM Baryonic Physics and Cosmology
3. H. Hildebrandt et al.,
RCSLenS: The Red-sequence Cluster Lensing Survey
4. B. Moraes et al.,
The thermal Sunyaev-Zel'dovich emission of SDSS DR8 redMaPPer galaxy clusters
5. H. Tanimura et al.,
Estimate of Electron Density and Temperature in Filaments between SDSS Luminos Red Galaxies

Preprint:

1. G.B. Zhao et al.,
The extended Baryon Oscillation Spectroscopic Survey (eBOSS): a cosmological forecast
arXiv:1510.08216 (Submitted to MNRAS).
2. **A. Hojjati** & E. V. Linder,
CMB Lensing and Scale Dependent New Physics
arXiv:1507.08292 (Submitted to PRD).

Published:

1. **A. Hojjati** et al.,
Dissecting the thermal Sunyaev-Zeldovich-gravitational lensing cross-correlation with hydrodynamical simulations,
JCAP10(2015)047, arXiv:1412.6051.
2. K. Liao et al.,
Strong Lens Time Delay Challenge: II. Results of TDC1,
ApJ, 800, 11, arXiv:1409.1254.
3. **A. Hojjati** & E. V. Linder,
Next Generation Strong Lensing Time Delay Estimation with Gaussian Processes
Phys. Rev. D 90, 123501, arXiv:1408.5143.

4. Y.Z. Ma, L. Van Waerbeke, G. Hinshaw, **A. Hojjati** & D. Scott,
Probing the diffuse baryon distribution with the lensing-tSZ cross-correlation,
2015, JCAP, 09, 046, arXiv:1404.4808 .
5. **A. Hojjati**, L. Pogosian, A. Silvestri & G.B. Zhao,
Observable physical modes of modified gravity,
Phys. Rev. D 89, 083505 (2014), arXiv:1312.5309.
6. G. Dobler, C. Fassnacht, T. Treu, P. J. Marshall, K. Liao, **A. Hojjati**, E. Linder
& N. Rumbaugh, *Strong Lens Time Delay Challenge: I. Experimental Design*,
ApJ, 799, 168, arXiv:1310.4830.
7. S. Asaba, C. Hikage, K. Koyama, G. Zhao, **A. Hojjati** & L. Pogosian,
Principal Component Analysis of Modified Gravity using Weak Lensing and Peculiar Velocity Measurements,
JCAP08(2013)029, arXiv:1306.2546.
8. **A. Hojjati**, E. V. Linder & Johan Samsing,
New constraints on the early expansion history,
Phys. Rev. Lett 111, 041301 (2013), arXiv:1304.3724.
9. **A. Hojjati**, A. G. Kim & E. V. Linder,
Robust Strong Lensing Time Delay Estimation ,
Phys. Rev. D 87, 123512 (2013), arXiv:1304.0309.
10. Y. Wang, D. Wands, L. Xu, J. De-Santiago & **A. Hojjati**,
Cosmological constraints on a decomposed Chaplygin gas,
Phys. Rev. D 87, 083503 (2013), arXiv:1301.5315.
11. **A. Hojjati**,
Degeneracies in parametrized modified gravity models,
JCAP01(2013)009, arXiv:1210.3903.
12. **A. Hojjati**, L. Pogosian, A. Silvestri & S. Talbot,
Practical solutions for perturbed $f(R)$ gravity,
Phys. Rev. D 86, 123503 (2012), arXiv:1210.6880.
13. **A. Hojjati**, G. Zhao, L. Pogosian, A. Silvestri, R. Crittenden & K. Koyama,
Cosmological tests of General Relativity: a principal component analysis,
Phys. Rev. D 85, 043508 (2012), arXiv:1111.3960.
14. **A. Hojjati**, L. Pogosian & G. Zhao,
Testing gravity with CAMB and CosmoMC,
JCAP 1108:005, arXiv:1106.4543.
15. **A. Hojjati**, L. Pogosian & G. Zhao,
Detecting Features in the Dark Energy Equation of State: A Wavelet Approach,
JCAP04(2010)007, arXiv:0912.4843v1.

16. A. Akhtari Zavareh, **A. Hojjati** & B. Mirza,
Generation of large scale magnetic fields by coupling to curvature and dilaton field,
Prog.Theor.Phys.117:803-822 (2007) arXiv:0707.3493v1.