#### ALIREZA HOJJATI

# **Publication List**

#### In progress:

#### 1. A. Hojjati et al.,

Cross-correlation of Planck tSZ and RCSLenS Galaxy Weak Lensing Maps: Implications for ICM Baryonic Physics and Cosmology

2. H. Hildebrandt et al.,

RCSLenS: The Red-sequence Cluster Lensing Survey

3. B. Moraes et al.,

The thermal Sunyaev-Zel'dovich emission of SDSS DR8 redMaPPer galaxy clusters

4. H. Tanimura et al.,

Estimate of Electron Density and Temperature in Filaments between SDSS Luminos Red Galaxies

### Preprint:

#### 1. A. Hojjati et al.,

Searching for Scalar Gravitational Interactions in Current and Future Cosmological Data

arXiv:1511.05962 (Submitted to PRD).

2. G.B. Zhao et al,

The extended Baryon Oscillation Spectroscopic Survey (eBOSS): a cosmological forecast

arXiv:1510.08216 (Submitted to MNRAS).

#### 3. 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, ICAP10(2015)047, pr. Viv. 1412-6051

 $\label{eq:JCAP10} JCAP10(2015)047,\ arXiv:1412.6051.$ 

#### 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.
- A. Hojjati, L. Pogosian, A. Silvestri & G.B. Zhao, Observable physical modes of modified gravity, Phys. Rev. D 89, 083505 (2014), arXiv:1312.5309.
- 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.
- 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.
- 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.
- 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.
- 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.