

# Nick Hand

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nhand@berkeley.edu

**Education**      **University of California, Berkeley**      Aug 2011 - Nov 2017  
Ph.D. Candidate in Astronomy

**Ph.D. Thesis:**

Title: *Modeling Galaxy Clustering and Redshift-space Distortions in Fourier Space*

Advisor: Uroš Seljak

**Princeton University**      Sept 2007 - June 2011  
B.A. in Astrophysical Sciences  
Certificate in Applications of Computing

**Cumulative GPA: 3.92/4.0** (*summa cum laude*)

**Awards & Honors**

|   |                     |
|---|---------------------|
| DOE Graduate Student Research Fellow                  | Aug 2016 - Aug 2017 |
| NSF Graduate Research Fellow                          | Aug 2012 - Aug 2016 |
| Berkeley Fellow for Graduate Study                    | Aug 2011 - Aug 2013 |
| Elected to Phi Beta Kappa (Princeton)                 | June 2011           |
| Elected to Society of Sigma Xi (Princeton)            | June 2011           |
| Sigma Xi Research Book Award (Princeton Astrophysics) | June 2011           |
| Shapiro Prize for Academic Excellence (Princeton)     | Sept 2008           |

**Publications**      **Hand, Nick** et al., “An optimal FFT-based anisotropic power spectrum estimator”, *JCAP*, **7**, 002 (2017).

**Hand, Nick**, et al. “Extending the modeling of the anisotropic galaxy power spectrum to  $k = 0.4 \text{ hMpc}^{-1}$ ”, *JCAP*, (2017).

Pinol Lucas, Cahn Robert, **Hand, Nick**, et al. “Imprint of DESI fiber assignment on the anisotropic power spectrum of emission line galaxies”, *JCAP*, (2017).

Feng, Yu and **Hand, Nick**, “Launching Python Applications on Peta-scale Massively Parallel Systems”, *Proceedings of the 15th Python in Science Conference*, (2016).

Okumura, Teppei, **Hand, Nick**, et al. “Galaxy power spectrum in redshift space: Combining perturbation theory with the halo model”, *JCAP*, (2015).

**Hand, Nick**, et al. “First measurement of the cross-correlation of CMB lensing

and galaxy lensing”, *Physical Review D*, (2015).

**Hand, Nick** et al., “Evidence of Galaxy Cluster Motions with the Kinematic Sunyaev-Zel’dovich Effect”, *Physical Review Letters*, **109**, 041101 (2012).

**Hand, Nick** et al., “The Atacama Cosmology Telescope: Detection of Sunyaev-Zel’dovich Decrement in Groups and Clusters Associated with Luminous Red Galaxies”, *ApJ*, **736**, 39 (2011).

**Hand, Nick** et al., “The Atacama Cosmology Telescope: Detection of Sunyaev-Zel’dovich Decrement in Groups and Clusters Associated with Luminous Red Galaxies”, *ApJ*, **736**, 39 (2011).

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|-----------------|--|--------------|
| <b>Teaching</b> | Graduate Student Instructor for Astronomy 7A, UC Berkeley with professor Eugene Chiang                       | Fall 2012    |
|                 | Graduate Student Instructor for Astronomy 7A, UC Berkeley with professor Eugene Chiang                       | Fall 2011    |
|                 | Peer tutor in Calculus I and II, physics I and II for freshmen and sophomores                                | 2008 to 2011 |
| <b>Skills</b>   | Astronomy: Training/use of Astrophysical Research Consortium 3.5 meter telescope at Apache Point Observatory |              |
|                 | Computer: Python, C++, C, Linux, NERSC supercomputers  |              |