## Sean P. Fillingham

CONTACT Department of Astronomy INFORMATION Physics-Astronomy Bldg

Physics-Astronomy Bldg University of Washington

Seattle, WA 98195

spf1719 [at] uw [dot] edu sfillingham.github.io

MILITARY United States Army (Active Duty, October 2003 - July 2008)

SERVICE Virginia National Guard (July 2008 - December 2009)

Research galaxy evolution, environmental quenching, near-field cosmology, star formation, reionization,

Interests galaxy formation, dark matter

spectroscopy, large surveys, machine learning, statistics

Professional Postdoctoral Research Associate September 2019 - Present

APPOINTMENTS Department of Astronomy University of Washington

EDUCATION University of California, Irvine

PhD Physics, 2019

Low-Mass Satellite Quenching in The Local Group

advisor: Michael C. Cooper, PhD

MS Physics, 2015

University of California, Los Angeles

BS Physics, 2013

Northern Virginia Community College

AS Engineering, 2010

AWARDS Graduate Deans Dissertation Fellowship, UC Irvine, 2018 - 2019

Regents Fellowship, UC Irvine, 2013 - 2014

Observatory Keck Observatory

EXPERIENCE DEIMOS: 17.5 nights

MOSFIRE: 4 nights OSIRIS: 1 night Lick Observatory KAST: 8 nights Subaru Observatory HSC: 0.5 nights Presentations

WFIRST Local Group Meeting, Caltech, Pasadena, CA (June, 2019) AAS 233rd Meeting (Dissertation Talk), Seattle, WA (January, 2019)

Galaxy Journal Club, STScI, Baltimore, MD (November 9, 2018)

Galread, UCLA, Los Angeles, CA (October 29, 2018)

Astronomy Seminar, UC Riverside, Riverside, CA (October 17, 2018)

Keck Science Meeting, Caltech (September, 2018)

GalFRESCA, Caltech (August, 2018)

TAPIR Seminar, Caltech, Pasadena, CA (September 1, 2017)

GalFRESCA, Caltech (August, 2017)

Santa Cruz Galaxy Workshop, UCSC (August, 2017)

The Carnegie Observatories Lunch Talk, Pasadena, CA (April 28, 2017)

Keck Science Meeting, Caltech (September, 2016) Santa Cruz Galaxy Workshop, UCSC (August, 2016) Santa Cruz Galaxy Workshop, UCSC (August, 2015)

TASC Meeting, The Carnegie Observatories (November, 2012)

References

Sarah Tuttle, Ph.D.

Assistant Professor E-mail: tuttlese[at]uw.edu

Department of Astronomy University of Washington

Michael C. Cooper, Ph.D. (Doctoral Advisor)

Professor E-mail: cooper[at]uci.edu

Department of Physics and Astronomy

University of California, Irvine

James S. Bullock, Ph.D.

Dean, School of Physical Sciences E-mail: bullock[at]uci.edu

Professor, Department of Physics and Astronomy

University of California, Irvine

Michael Boylan-Kolchin, Ph.D.

Associate Professor E-mail: mbk[at]astro.as.utexas.edu

Department of Astronomy

The University of Texas at Austin

## Publications

7. Characterizing the Infall Times and Quenching Timescales of Milky Way Satellites with *Gaia* Proper Motions

Fillingham, S. P., Cooper, M. C., Kelly, T., et al. 2019, MNRAS under review (arXiv:1906.04180)

6. The Suppression of Star Formation on the Smallest Scales: What Role Does Environment Play?

Rodriguez Wimberly, M. K., Cooper, M. C., Fillingham, S. P., et al. 2019, MNRAS, 483, 4031

5. The Evolution of Environmental Quenching Timescales to  $z\sim 1.6$ : Evidence for Dynamically-Driven Quenching of the Cluster Galaxy Population

Foltz, R., Wilson, G., Muzzin, A., et al. 2018, ApJ, 866, 136

4. Environmental Quenching of Low-Mass Galaxies in the Field

Fillingham, S. P., Cooper, M. C., Boylan-Kolchin, M., et al. 2018, MNRAS, 477, 4491

- 3. Discovery and Follow-Up Observations of the Young Type Ia Supernova SN 2016COJ Zheng, W., Filippenko, A. V., Mauerhan, J., et al. 2017, ApJ, 841, 64
- 2. Under Pressure: Quenching Star Formation in Low-Mass Satellite Galaxies via Stripping

Fillingham, S. P., Cooper, M. C., Pace, A. B., et al. 2016, MNRAS, 463, 1916

1. Taking Care of Business in a Flash f: Constraining the Timescale for Low-Mass Satellite Quenching with ELVIS

Fillingham, S. P., Cooper, M. C., Wheeler, C., et al. 2015, MNRAS, 454, 2039