## Sean P. Fillingham

CONTACT Department of Astronomy INFORMATION University of Washington

Seattle, WA 98195

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MILITARY Discharge status: Honorable, protected Veteran

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

Virginia National Guard (July 2008 - December 2009)

CITIZENSHIP USA

Professional Postdoctoral Scholar September 2019 - Present

APPOINTMENTS University of Washington

FPS Metrics Development Lead December 2020 - Present

SDSS-V

EDUCATION University of California, Irvine

PhD, Physics September 2019
MS, Physics December 2015

University of California, Los Angeles

BS, Physics June 2013

Northern Virginia Community College

AS, Engineering May 2010

TECHNICAL Skilled:

SKILLS Python (NumPy, Matplotlib, SciPy, Astropy, scikit-Learn)

SQL (MySQL, SQLAlchemy, peewee)

bash, Unix/MacOS, git Familiar: C, R, IDL

Software: gbtidl, IRAF/pyRAF, spec2d, spec1d, zspec

Observing Principal Investigator

PROPOSALS AND GBT - Characterizing HI Emission in BreakBRD galaxies (2020B, 24 hours)

Grants Co-Investigator

GBT - HI-MaNGA: HI Followup for MaNGA Galaxies (Ongoing, 400 backup hours) GBT - Exploratory Observations of CO(1-0) 115.271 GHz Emission in MaNGA

Galaxies (2019B, 4.3 hours)

Keck/DEIMOS - Constraining the Physics of Satellite Quenching at z<1

(2016-2019, 13.5 nights)

HST (AR-14289) - The Faint Galaxy Frontier: Galaxy Formation at the Extremes

of Mass and Density in the Deep Fields

Observing EXPERIENCE Green Bank Observatory GBT - L band: 24 hours

Keck Observatory

DEIMOS: 17.5 nights MOSFIRE: 4 nights OSIRIS: 1 night Lick Observatory KAST: 8 nights Subaru Observatory HSC: 0.5 nights

Professional ACTIVITIES

Reviewer: ALMA Cycle 8 Review, 2021 Panel Member: NASA ADAP Review, 2020 Referee: Astrophysical Journal, 2020 - present

Referee: Monthly Notices of the Royal Astronomical Society, 2019 - present

Postdoc Rep: UW Faculty-Postdoc Committee and Faculty Meetings, 2019 - 2020

Member: SDSS V, 2020 - present Member: SDSS IV, 2019 - present

Member: American Association for the Advancement of Science, 2020 - present

Member: American Physical Society, 2019 - present Member: American Astronomical Society, 2017 - present

AWARDS

Graduate Deans Dissertation Fellowship, UC Irvine, 2018 - 2019

Regents Fellowship, UC Irvine, 2013 - 2014

SELECT 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) Astronomy Seminar, UC Riverside, Riverside, CA (October 17, 2018) Keck Science Meeting, Caltech (September, 2018)

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

## **PUBLICATIONS**

12. Ultra Faint Dwarf Galaxies in the Nancy Grace Roman Space Telescope High Latitude Survey

Fillingham, S. P., Smercina, A., et al. 2021, in prep

11. A CO detection in a BreakBRD Spiral Galaxy

Fillingham, S. P., Myles, M., Stark, D., et al. 2021 in prep

10. A machine learning approach to measuring the quenched fraction of low-mass satellites beyond the Local Group

- Dark Matter Interpretation of the Fermi-LAT Observations Toward the Outer Halo of M31
  - Karwin, C. M., Murgia, S., Moskalenko, I. V., et al. 2021 PhRvD, 103, 023027
- 8. The GOGREEN and GCLASS Surveys: Data Release
  Balogh, M. L., van der Burg, R. F. J., Muzzin, A., et al. 2021, MNRAS, 500, 1
- 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
- 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