Sean P. Fillingham

Contact Information

Department of Physics and Astronomy
University of California Irvine
2137 Frederick Reines Hall
Irvine, CA 92617
sfilling [at] uci [dot] edu

Citizenship

USA (Born: Santa Monica, CA)

Military Service

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

3rd Platoon, Delta Company, 1st Battalion, 3D US Infantry (The Old Guard)

- SGT/Infantry Fire Team Leader

Virginia National Guard (July 2008 - December 2009)

Delta Company, Fredericksburg, 25 Inf Division

- SGT/Infantry Section Leader

Research Interests

galaxy evolution, environmental quenching, near-field cosmology, star formation, spectroscopy, large surveys, reionization, galaxy formation, dark matter

Education

University of California, Irvine

Doctor of Philosophy, Physics, 2019 *(Expected)*

- *The Evolution of Low-Mass Satellite Galaxy Quenching Across Cosmic Time*

Master of Science, Physics, 2015

University of California, Los Angeles

Bachelor of Science, Physics, 2013

Northern Virginia Community College

Associate of Science, Engineering, 2010

Publications

Environmental Quenching of Low-Mass Galaxies in the Field
Fillingham, S. P., Cooper, M. C., Boylan-Kolchin, M., et al. 2018, MNRAS (under review)

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

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

Taking Care of Business in a Flash ϟ: Constraining the Timescale for Low-Mass Satellite Quenching with ELVIS
Fillingham, S. P., Cooper, M. C., Wheeler, C., et al. 2015, MNRAS, 454, 2039

Talks

Seminars:

TAPIR Seminar, Caltech, Pasadena, CA (September 1, 2017)
The Carnegie Observatories Lunch Talk, Pasadena, CA (April 28, 2017)

Conferences:

GalFRESCA, Caltech (August, 2017)
Santa Cruz Galaxy Workshop, UCSC (August, 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)

Conference Posters

Under Pressure: Quenching Star Formation in Low-Mass Satellite Galaxies via Stripping
Fillingham, S., Cooper, M. C., Pace, A. B., et al.
Presented at *Mapping the Pathways of Galaxy Transformation Across Time and Space*, August 2016, Avalon, Catalina Island, CA

Testing Observational Probes of the z=2.2 Circumgalactic Medium using Cosmological Scale Hydrodynamic Simulations
Fillingham, S., Peeples, M. S., Oppenheimer, B. D., et al. 2013, American Astronomical Society Meeting Abstracts #221, 221, #245.08
Presented at AAS 221st Meeting, Long Beach, CA

Observing Experience

Keck Observatory
DEIMOS: 15 nights
MOSFIRE: 4 nights
OSIRIS: 1 night
Lick Observatory
KAST: 8 nights
Subaru Observatory
HSC: 0.5 nights

Additional Training

Data Science Certificate, Data Science Initiative, UC Irvine (In Progress)
San Diego Supercomputing Center Summer Workshop, UCSD, August 2017
Rudolf Minkowski Observational Workshop, Lick Observatory, October 2015

Teaching Experience

Teaching Assistant:

Physics 2 - Introduction to Math Methods for Physics	Fall 2014
Physics 3LB - Basic Physics Lab	Summer 2015
Physics 3LC - Basic Physics Lab	Fall 2014
Physics 7C - Classical Physics	Fall 2013, Winter 2014
Physics 7D - Classical Physics	Summer 2014
Physics 7LC - Classical Physics Lab	Fall 2013, Winter 2014
Physics 7LD - Classical Physics Lab	Summer 2014
Physics 20B - Cosmology	Spring 2014, Winter 2015
Physics 20D - Space Science	Fall 2015
Physics 20E - Life in the Universe	Spring 2015
Physics 116 - Relativity	Fall 2015

References

Michael C. Cooper, Ph.D. (Doctoral Advisor)
Associate Professor
Department of Physics and Astronomy
University of California, Irvine
E-mail: cooper [at] uci [dot] edu

James S. Bullock, Ph.D.
Professor and Chair
Department of Physics and Astronomy
University of California, Irvine
E-mail: bullock [at] uci [dot] edu