# Sean P. Fillingham

Contact Department of Physics and Astronomy

Information University of California Irvine

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CITIZENSHIP USA

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, INTERESTS spectroscopy, large surveys, reionization, galaxy formation, dark matter

EDUCATION University of California, Irvine

Ph.D., Physics, 2019 (In progress)

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

• Advisor: Michael C. Cooper, Ph.D.

M.S., Physics, 2015

University of California, Los Angeles

B.S., Physics, 2013

Northern Virginia Community College

A.S., Engineering, 2010

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

Regents Fellowship, UC Irvine, 2013 - 2014

#### **Publications**

Citations: 64 (62 first author)

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. 2018, MNRAS, in prep

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, submitted

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

- 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 4: 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 Keck Observatory

EXPERIENCE DEIMOS: 17.5 nights

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

TEACHING Teaching Assistant:

EXPERIENCE 11 Undergraduate Physics Courses (both major and non-majors)

ADDITIONAL Data Science Certificate, Data Science Initiative, UC Irvine (In Progress)

TRAINING San Diego Supercomputing Center Summer Institute, UCSD, August 2017

Rudolf Minkowski Observational Workshop, Lick Observatory, October 2015

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

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

Department of Physics and Astronomy

University of California, Irvine

James S. Bullock, Ph.D.

Professor and Chair E-mail: bullock[at]uci.edu

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