

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](mailto:sfilling@uci.edu)

CITIZENSHIP USA (Born: Santa Monica, CA)

MILITARY
SERVICE United States Army (Active Duty, October 2003 - July 2008)
Virginia National Guard (July 2008 - December 2009)

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

EDUCATION **University of California, Irvine**

Ph.D., Physics, 2019 (*Expected*)

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

M.S., Physics, 2015

University of California, Los Angeles

B.S., Physics, 2013

Northern Virginia Community College

A.S., Engineering, 2010

PUBLICATIONS *Exploring the Quenching of Extremely Low-Mass Galaxies with Fat ELVIS*
Rodríguez Wimberly, M. K., Cooper, M. C., **Fillingham, S. P.**, et al. 2018, MNRAS
(in prep)

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 (under review)

Environmental Quenching of Low-Mass Galaxies in the Field

Fillingham, S. P., Cooper, M. C., Boylean-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 ‡: 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	<p>Seminars:</p> <p>TAPIR Seminar, Caltech, Pasadena, CA (September 1, 2017)</p> <p>The Carnegie Observatories Lunch Talk, Pasadena, CA (April 28, 2017)</p> <p>Conferences:</p> <p>GalFRESCA, Caltech (August, 2017)</p> <p>Santa Cruz Galaxy Workshop, UCSC (August, 2017)</p> <p>Keck Science Meeting, Caltech (September, 2016)</p> <p>Santa Cruz Galaxy Workshop, UCSC (August, 2016)</p> <p>Santa Cruz Galaxy Workshop, UCSC (August, 2015)</p> <p>TASC Meeting, The Carnegie Observatories (November, 2012)</p>																						
CONFERENCE POSTERS	<p><i>Under Pressure: Quenching Star Formation in Low-Mass Satellite Galaxies via Stripping</i> Fillingham, S., Cooper, M. C., Pace, A. B., et al. Presented at <i>Mapping the Pathways of Galaxy Transformation Across Time and Space</i>, August 2016, Avalon, Catalina Island, CA</p> <p><i>Testing Observational Probes of the $z=2.2$ Circumgalactic Medium using Cosmological Scale Hydrodynamic Simulations</i> 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</p>																						
OBSERVING EXPERIENCE	<p>Keck Observatory</p> <p>DEIMOS: 15 nights</p> <p>MOSFIRE: 4 nights</p> <p>OSIRIS: 1 night</p> <p>Lick Observatory</p> <p>KAST: 8 nights</p> <p>Subaru Observatory</p> <p>HSC: 0.5 nights</p>																						
TEACHING EXPERIENCE	<p>Teaching Assistant:</p> <table> <tr> <td>Physics 2 - Introduction to Math Methods for Physics</td> <td>Fall 2014</td> </tr> <tr> <td>Physics 3LB - Basic Physics Lab</td> <td>Summer 2015</td> </tr> <tr> <td>Physics 3LC - Basic Physics Lab</td> <td>Fall 2014</td> </tr> <tr> <td>Physics 7C - Classical Physics</td> <td>Fall 2013, Winter 2014</td> </tr> <tr> <td>Physics 7D - Classical Physics</td> <td>Summer 2014</td> </tr> <tr> <td>Physics 7LC - Classical Physics Lab</td> <td>Fall 2013, Winter 2014</td> </tr> <tr> <td>Physics 7LD - Classical Physics Lab</td> <td>Summer 2014</td> </tr> <tr> <td>Physics 20B - Cosmology</td> <td>Spring 2014, Winter 2015</td> </tr> <tr> <td>Physics 20D - Space Science</td> <td>Fall 2015</td> </tr> <tr> <td>Physics 20E - Life in the Universe</td> <td>Spring 2015</td> </tr> <tr> <td>Physics 116 - Relativity</td> <td>Fall 2015</td> </tr> </table>	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
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Physics 20E - Life in the Universe	Spring 2015																						
Physics 116 - Relativity	Fall 2015																						
ADDITIONAL TRAINING	<p>Data Science Certificate, Data Science Initiative, UC Irvine (In Progress)</p> <p>San Diego Supercomputing Center Summer Workshop, UCSD, August 2017</p> <p>Rudolf Minkowski Observational Workshop, Lick Observatory, October 2015</p>																						

REFERENCES

Michael C. Cooper, Ph.D. (Doctoral Advisor)
Associate Professor
Department of Physics and Astronomy
University of California, Irvine

E-mail: [cooper\[at\]uci.edu](mailto:cooper[at]uci.edu)

James S. Bullock, Ph.D.
Professor and Chair
Department of Physics and Astronomy
University of California, Irvine

E-mail: [bullock\[at\]uci.edu](mailto:bullock[at]uci.edu)

Michael Boylan-Kolchin, Ph.D.
Assistant Professor
Department of Astronomy
The University of Texas at Austin

E-mail: [mbk\[at\]astro.as.utexas.edu](mailto:mbk[at]astro.as.utexas.edu)