

# JENNIFER COOPER

Ph.D Candidate in Physics - website

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## EDUCATION

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<b>University of Kansas</b>	<i>August 2017 - Present</i>
Madison & Lila Self Graduate Fellow, Ph.D Candidate in Physics	
<b>California State University Los Angeles</b>	<i>2015 - 2017</i>
Master of Science in Physics	<i>3.6 GPA</i>
Thesis: <i>Comparing High-redshift dropouts in the GOODS-S Field from MultiDrizzle and SelfCal maps - UC Irvine</i>	
<b>Cornell University</b>	<i>2009 - 2014</i>
Bachelor of Arts in Geophysics, <i>cum laude</i> & College of AAS Research Honors	<i>3.6 GPA</i>
Thesis: <i>Forgotten Volcanoes of the Global Deformation Task Force</i>	
Bachelor of Arts in Archaeology, Minor in Astrophysics	

## AWARDS & GRANTS

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<b>Madison &amp; Lila Self Graduate Fellowship</b>	<i>2017 - 2021</i>
NSF Travel Award - POLAR 2018	<i>2018</i>
Antarctic Science Ltd Travel Award	<i>2018</i>
American Astronomical Society International Travel Grant	<i>2014, 15, 16, 18</i>
Dorothy Clark Lettice Scholarship	<i>2017</i>
Outstanding Teaching - Frieda Stahl Fellowship	<i>2016</i>
FGSA Travel Grant for Excellence in Graduate Research, American Physical Society	<i>2016</i>
Hirsch Foundation Travel Grant for Fieldwork	<i>2012</i>

## PROFESSIONAL ACTIVITIES & SERVICES

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<b>President</b> , Association of Polar Early Career Scientists (APECS)	<i>2019 - 20</i>
<b>Technical Judge</b> , KU Self Engineering Leadership Fellows Program	<i>2020</i>
<b>Vice President</b> , Association of Polar Early Career Scientists (APECS)	<i>2018 - 19</i>
<b>APECS Representative</b> , Future Earth: Network of Networks	<i>2019 - present</i>
<b>Steering Committee Member</b> , SCAR Astronomy & Astrophysics	<i>2015 - present</i>
<b>Steering Committee Member</b> , SCAR Antarctic Volcanism	<i>2016 - present</i>
<b>Organizational Review Committee</b> , APECS	<i>2019</i>
<b>SOC</b> , 5th SCAR AAA Workshop, Mont Blanc, Italy	<i>2018 - 19</i>
<b>Organizing Chair</b> , APECS 2nd World Summit, Davos, Switzerland	<i>2017 - 18</i>
<b>Astronomy Session Convener</b> , SCAR 2016, Kuala Lumpur, Malaysia	<i>2016</i>
<b>Council Member</b> , Association of Polar Early Career Scientists	<i>2015 - present</i>
<b>LOC</b> , 3rd SCAR AAA Workshop, Volcano, HI	<i>2015</i>

## PUBLICATIONS

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- Cooper, J.**, Rudnick, G., et. al (2019) *The effect of the cluster environment on H-alpha based star formation rates at z=0.5: an HST Grism study*. In prep.
- Henderson, S., Pritchard, M., **Cooper, J.**, and Aoki, Y. (2019) *Remotely sensed deformation and thermal anomalies at Mount Pagan, Mariana Islands*. Front. Earth Sci. 7:238.
- Fugmann, G., Fletcher T., **Cooper, J.**, Schulze, V., Spolaor, A. and APECS Executive Committee 2016-2017 (2016): Association of Polar Early Career Scientists (APECS) International Directorate

Office - Shaping the Future of Polar Research (Project: No. 229563) - *Final Results Report for Research Council of Norway*. Tromsø, Norway, 46p.

Thelen, W.A., and **Cooper, J.** *An analysis of three new infrasound arrays around Kilauea Volcano*: U.S. Geological Survey Open-File Report 20141253, 29 p.

## RESEARCH EXPERIENCE

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KU Graduate Research Assistant, Prof Gregory Rudnick - Galaxy Evolution	2017- present
UCI Graduate Research Assistant, Prof Asantha Coory - Image Processing	2016 - 17
USRA-SOFIA/NASA ARC Research Student, Dr. Randolph Klein - Star Formation	2015
ICRAR Pre-Doctoral Scholar, Prof Danial Obreschcow - Cosmological Simulations	2015
Cornell Undergraduate Research Assistant, Prof Matthew Pritchard - Volcano Geophysics	2013 - 15
University of Queensland Research Scholar, Dr. David Parkinson - Spectra Analysis	2013-14
Swinburne Univ. of Technology Research Scholar, Prof Karl Glazebrook - Galaxy Evolution	2013
Universidad de Colima Volcano Monitoring Intern, Prof Nick Varley - Volcano Geophysics	2013
Dept. of State US Embassy Moscow, Science Intern, David Citron - US/Russia Relations	2013
USGS HVO Seismological Intern, Dr. Weston Thelen - Volcano Geophysics	2012
SUNY Binghamton Archaeology Field Student - Pleistocene Excavation	2012
SETI Institute/NASA ARC REU Intern, Dr. Cristina Dalle Ore - Planetary Science	2011
Cornell Undergraduate Research Assistant, Prof Martha Haynes - Radio Astronomy	2010 - 12
Archaeology Field Intern, Shoals Marine Laboratory, Prof Nathan Hamilton	2010, 11

## PRESENTATIONS

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- Pushing HST to the limit: Expanding our view of galaxy clusters through a grism study Contributed Talk. *Science with Hubble and JWST VI*, April 2020. Stockholm, Sweden.
- The Role of APECS in SCAR and the Polar Sciences. Contributed Talk. *SCAR AAA 5th Workshop*, June 2019. Mount Blanc, Italy.
- Nature vs. Nurture in EDiSCS galaxies. Invited Talk. *Astrophysics Seminar, University of Missouri Physics & Astronomy*, April 2019. Columbia, MO.
- Nature vs. Nurture in Galaxies. Invited Talk. *Red Hot Research, University of Kansas*, March 2019. Lawrence, KS.
- A. Bliss, A. Bradley, O. Lee, **J. Cooper**, M. Dryak, E. Enderliln USAPECS: a national ECS network in the global context *American Union Geophysical Meeting*, December 2018. San Francisco, CA USA. Poster.
- What's Ahead for USAPECS in 2018 - 2019? Invited Talk. *APECS Turkey Workshop on Outreach & Education*, October 2018. Istanbul, Turkey.
- J. Cooper**, A. Cooray, H. Nayyeri Comparing High-redshift Dropouts from GOODS-S in MultiDrizzle and SelfCal Maps *Msc Defense*, May 2017. CSULA, USA.
- J. Cooper**, C. Power, D. Obreschcow, S. Terebey Correlating Dark Matter Simulations to SPT Clusters *SCAR Open Science Conference 2016*, August 2016. Kuala Lumpur, Malaysia. Poster.
- J. Jay, B. Andrews, M. Pritchard, **J. Cooper**, S. Henderson, F. Delgado, J. Biggs, S. Ebmeier, Preparing for Routine Satellite Global Volcano Deformation Observations: The Volcano Deformation Database Task Force. *American Union Geophysical Meeting*, December 2014. San Francisco, CA USA. Poster.
- M. Pritchard, M. Furtney, **J. Cooper** VPG Spotlight: Is a zombie volcano a thing? 2014, *Education and Outreach Spotlight AGU*. Article.
- M. Pritchard, J. Jay, J. Briggs, S. Ebmeier, **J. Cooper**, S. Henderson, F. Delgado Global synthesis of volcano deformation: results of the volcano deformation task force *American Union Geophysical Meeting*, December 2013. San Francisco, CA USA. Poster.

- Cooper, J. R.** Global Study of Volcanic Island Deformation Through InSAR *Undergraduate Research Symposium Presentation & Thesis Defense*, May 2014. Cornell University, Ithaca, NY.
- W. Thelen, M. Garces, *J.R. Cooper*, N. Badger, A. Perttu, B. Williams, Infrasonic Monitoring Network on the Big Island *European Geosciences Union Meeting*, April 2013. Vienna, Austria.
- J. R. Cooper**, C. M. Dalle Ore, J. P. Emery, A Spitzer-based Classification of TNOs *American Geophysical Union Fall Meeting*, December 2011. San Francisco, CA USA. Poster.
- F. Colas, J. Berthier, F. Vachier, F. Marchis, P. M. M. Jenniskens, J. W. Owen, B. Timerson, S. Preston, R. Venable, M. Allain, R. Cawthon, **J. R. Cooper**, J. Fixelle, S. Hicks, W. L. Meldman-Floch, J. Minter, M. Phillips, Shape and Size of (90) Antiope Derived From An Exceptional Stellar Occultation on July 19 2011. *American Geophysical Union Fall Meeting*, December 2011. San Francisco, CA USA. Poster.

## EXTRACURRICULARS

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University of Kansas Swim & Dive Club - Nationals Qualifier	<i>2018, 2019, 2020</i>
University of Kansas Marching Jayhawks Colorguard Member	<i>2017</i>
Cornell University Big Red Marching Band Colorguard Member	<i>2009 - 14</i>
NCAA Division 1 Cornell University Swimming & Diving Team	<i>2011</i>
NCAA Division 1 Cornell University Gymnastics Team	<i>2009 - 10</i>
USA Swimming - 14-time recorder holder, 25-time League Champion	<i>1996 - 2009</i>
USA Gymnastics - Junior Olympic Level 10 National Competitor	<i>1996 - 2009</i>