JENNIFER COOPER

Ph.D, Physics - website

EDUCATION

University of Kansas	2017 - 2021
Madison & Lila Self Graduate Fellow, Ph.D in Physics	
Science & Technical Managers Graduate Certificate	2020
California State University Los Angeles	2015 - 2017
Master of Science in Physics	3.6 GPA
Thesis: Comparing High-redshift dropouts in the GOODS-S Field	
from MultiDrizzle and SelfCal maps - UC Irvine	
Cornell University	2009 - 2014
Bachelor of Arts in Geophysics, cum laude & College of AAS Research Honors	3.6 Major GPA
Thesis: Forgotten Volcanoes of the Global Deformation Task Force	
Bachelor of Arts in Archaeology, Minor in Astrophysics	

MANAGEMENT & ACADEMIC SERVICE

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

AWARDS & GRANTS

Madison & Lila Self Graduate Fellowship	2017 - 2021
KU Engineering Showcase - 1st Place Presentation	2021
NSF Travel Award - POLAR 2018	2018
Antarctic Science Ltd Travel Award	2018
American Astronomical Society International Travel Grant	2014, 15, 16, 18, 20
Dorothy Clark Lettice Scholarship	2017
Outstanding Teaching - Frieda Stahl Fellowship	2016
FGSA Travel Grant for Excellence in Graduate Research, American Physical Soc	iety 2016
Hirsch Foundation Travel Grant for Fieldwork	2012

PUBLICATIONS

Cooper, J., Rudnick, G., et. al (2021) The effect of the cluster environment on H-alpha based star formation rates at z=0.5: an HST Grism study. Submitted.

APECS Executive Committee (2020) APECS Strategic Plan 2021-2025. Editor & Writer.

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. Tromso, 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

KU Graduate Research Assistant, Prof Gregory Rudnick - Galaxy Evolution 201	7- present
UCI Graduate Research Assistant, Prof Asantha Coory - Image Processing	2016 - 17
USRA-SOFIA/NASA ARC Research Student, Dr. Randolf Klein - Star Formation	2015
ICRAR Pre-Doctoral Scholar, Prof Danial Obreskchow - 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 Binghampton 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

- 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.
- <u>Nature vs. Nurture in Galaxies.</u> Invited Talk. *Red Hot Research, University of Kansas*, March 2019. Lawrence, KS.
- A. Bliss, A. Bradley, O. Lee, **J. Cooper**, M. Dryak, E. Enderliln <u>USAPECS: a national ECS network in the global context</u> 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. Obreschkow, S. Terebey <u>Correlating Dark Matter Simulations to SPT Clusters</u>
 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** <u>VPG Spotlight: Is a zombie volcano a thing?</u> 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, <u>Infrasonic Monitoring Network</u> on the Big Island European Geosciences Union Meeting, April 2013. Vienna, Austria.
- J. R. Cooper, C. M. Dalle Ore, J. P. Emery, <u>A Spitzer-based Classification of TNOs</u> 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. Minteer, 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

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