Evan H. Anders

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in/①/②: evanhanders

Research Interests

Computational fluid dynamics and its applications to dynamics in stellar interiors and atmospheres. The effects of stratification, rotation, and magnetism on stellar convection.

Education

May 2020* **Ph.D.**, *University of Colorado – Boulder*, Astrophysical & Planetary Sciences. *Expected Graduation Date; Thesis title TBD

Dec. 2017 M.S., University of Colorado - Boulder, Astrophysical & Planetary Sciences.

May 2014 B.S., Whitworth University, Physics.

Research Experience

2015-present **Graduate Research Fellow/Assistant**, *University of Colorado – Boulder & Laboratory for Atmospheric and Space Physics*, Boulder, CO.

2013 NSF Summer Undergraduate Research Fellow, LIGO, Hanford, WA.

2012 DOE Summer Undergraduate Laboratory Intern, PNNL, Richland, WA.

Grants & Fellowships Awarded

2018-2020 NASA Earth and Space Science Fellowship, \$90,000, Boulder, CO.

Fundamental Studies Into the Solar Convective Conundrum: Do Giant Cells Exist? Grant Number 80NSSC18K1199

2015-2018 NSO George Ellery Hale Graduate Fellowship, Boulder, CO.

Fellowship covers tuition, fees, and graduate research stipend for three full years. Fellowship overview available online at https://www.nso.edu/students/hale-fellowships/

Invited Presentations

2019 2. Title TBD

Princeton University, Star Formation/ISM Rendezvous (SFIR) Seminar. Dec. 4.

1. Entropy Rain: Dilution and Compression of Thermals in Stratified Domains University of Colorado – Boulder, Applied Math Geophysical and Astrophysical Fluid Dynamics (GAFD) Seminar. Oct. 1.

Recent Conferences

2019 **APS Division of Fluid Dynamics**, *Talk*, Seattle, WA.

Dilution and Compression of Thermals in Stratified Domains

Compressible Convection Conference, Talk, Newcastle Upon Tyne, UK.

Entropy Rain: Dilution and Compression of Turbulent Thermals in Stratified Domains

Stellar Hydro Days V, Poster, Exeter, UK.

Accelerating the evolution of atmospheric structure in convective simulations

American Astronomical Society's 233rd Meeting, Poster, Seattle, WA.

Accelerating the evolution of simulated convective atmospheres

Awards & Honors

- 2019 AAS 233 Chambliss Graduate Student Poster Contest, Honorable Mention, American Astronomical Society.
- 2016 **Comprehensive Exam II High Pass**, University of Colorado Boulder. Awarded for the defense of publication-quality research
- 2016 **Carl Hansen Graduate Fellowship**, *\$1,000*, University of Colorado Boulder. Awarded to a graduate student studying stellar interiors
- 2014 **President's Award for Outstanding Academic Achievement**, Whitworth Univ.. Awarded to students graduating with 4.0 GPAs

Select Departmental Service

- 2019-2020 Member of newly-formed admissions setup committee
- 2017-2019 Voting member of graduate admissions committee, two years
- 2016-2017 Voting member of hiring committee for director of Fiske Planetarium

Select Professional Development and Teaching Experience

- 2019 UCSC ISEE Professional Development Program, Design Team Leader.
 Led a team through a 4-month, 100-hour program that involved the design and teaching of a day-long inquiry activity on buoyancy.
- 2017 Co-Instructor of Record, ASTR 2600: Introduction to Scientific Programming, University of Colorado Boulder, Boulder, CO.
 Redesigned course from scratch, including lectures, homeworks, tutorials, and projects.

Select Outreach Experience

2016-2019 **CU STARs**, *Graduate Student Coordinator*, University of Colorado – Boulder. CU STARs (CU Boulder Science, Technology, and Astronomy RecruitS) visits underserved schools across all of Colorado and gives high school students an opportunity to learn about and engage with space science. Graduate students serve as mentors to undergraduates, help design and improve outreach courses, and ensure outreach visits run smoothly.