

Evan H. Anders

GRADUATE STUDENT — ASTROPHYSICAL AND PLANETARY SCIENCES

✉ evan.anders@colorado.edu | 🏠 evanhanders.bitbucket.io | 📧 [evanhanders](#) | 📺 [evanhanders](#)

Education

University of Colorado – Boulder (CU Boulder)

PH.D IN ASTROPHYSICAL AND PLANETARY SCIENCES · EXPECTED MAY 2020

M.S. IN ASTROPHYSICAL AND PLANETARY SCIENCES · DECEMBER 2016

Boulder, CO

Aug. 2014 - Present

Whitworth University

B.S. IN PHYSICS; MINORS IN COMPUTER SCIENCE & MATH · CUMULATIVE GPA 4.0/4.0

Spokane, WA

Aug. 2010 - May 2014

Research Experience

CU Boulder & Laboratory for Atmospheric and Space Physics (LASP)

GRADUATE RESEARCH ASSISTANT

- Working to understand the fundamental heat transport properties of stratified convection.
- Performing large-scale numerical simulations on NASA Pleiades.

Boulder, CO

May 2015 - Present

Laser Interferometer Gravitational-Wave Observatory (LIGO)

NSF SURF FELLOW

- Developed a tool in Python to analyze calibration lines in LIGO's power spectrum.
- Analyzed the consistency between input and output channels in LIGO's photon calibration system.

Hanford, WA

Summer 2013

Pacific Northwest National Laboratory (PNNL)

DOE SULI INTERN

- Optimized functions in GAIN, a Python module which applies PNNL's Global Arrays parallel programming toolkit to the NumPy Python module.
- Designed new parallel algorithms for the GAIN 'reduce' function and developed the foundation of the GAIN 'master-slave' interface.

Richland, WA

Summer 2012

Relevant Publications

Anders, E.H., Brown, B.P. and Oishi, J. S. "Accelerated convergence of convective simulations...". 2018. Submitted to Phys. Rev. Fluids.

Anders, E.H. and Brown, B.P. "Convective heat transport in stratified atmospheres...". 2017. Phys. Rev. Fluids 2, 083501.

Teaching Experience

CU Boulder

GRADUATE PART-TIME INSTRUCTOR FOR ASTR 2600

- Co-instructor of record for an introductory course in Python programming
- Developed curriculum including lectures, tutorials, homework, and the final exam.

Boulder, CO

Summer 2017

GRADUATE TEACHING ASSISTANT FOR ASTR 1010

- Delivered mini-lectures to familiarize students with lab material.
- Held office hours and helped staff the Astronomy Help Room (AHR).

August 2014 - December 2015, Fall 2017

CU Boulder Graduate Teaching Program

LEAD GRADUATE TEACHER

- Led video consultations with Graduate Teaching Assistants
- Coordinated and ran orientation for new Teaching Assistants in the department.

Boulder, CO

August 2016-May 2017

Whitworth University

COMPUTATIONAL PHYSICS TEACHING ASSISTANT

- Guided students in designing computational models of physical phenomena.
- Assisted students in translating mathematical operations into numerical algorithms.

Spokane, WA

January 2014

PHYSICS TUTOR

- Reviewed basic concepts with students to help improve problem-solving skills.
- Provided supplemental instruction to clarify course material for students.

Fall 2012 - May 2014

PHYSICS LAB TEACHING ASSISTANT

- Instructed students through the completion of laboratory activities.

August 2011 - May 2012

Awards

2016	Carl Hansen Graduate Fellowship , awarded to a graduate student studying stellar interiors	<i>CU Boulder</i>
2015	George Ellery Hale Graduate Fellowship , providing funding for three years of graduate research	<i>CU Boulder / NSO</i>
2014	President's Award for Outstanding Academic Achievement , for graduating with a 4.0 GPA	<i>Whitworth U.</i>
2013	Johnston-Hansen Foundation Scholarship , awarded to a Physics student	<i>Whitworth U.</i>
2012	Carl Hansen Pre-Engineering Scholarship , awarded to an Engineering student	<i>Whitworth U.</i>
2012	Math / Comp. Sci. Departmental Scholarship , awarded to a student in the Math / Comp. Sci. department	<i>Whitworth U.</i>
2011	Carl Hansen Pre-Engineering Scholarship , awarded to an Engineering student	<i>Whitworth U.</i>
2010	Mind & Heart Scholarship , awarded to an entering undergraduate to assist with four years of tuition	<i>Whitworth U.</i>

Service

2017-18	Member , Graduate admissions committee	<i>CU Boulder</i>
2016-17	Member , Hiring committee for director of Fiske Planetarium	<i>CU Boulder</i>
2016	Graduate Student Member , Exam committee for CU APS Comprehensive Exam 1	<i>CU Boulder</i>
2016	Chair , Graduate student committee for NSO/CU faculty appointment	<i>CU Boulder</i>
2015	Member , Graduate student committee for three-year NSO/CU appointment	<i>CU Boulder</i>

Outreach

(CU STARS) CU Boulder Science, Technology, and Astronomy RecruitS

Boulder, CO

GRADUATE COORDINATOR

August 2016-Present

- Guided undergraduate students in designing hands-on high school-level lessons to teach basic concepts in astronomy and astrophysics.
- Ensured middle/high school visits across Colorado ran smoothly.