

ASTR/PHYS PROFESSIONAL DEVELOPMENT



Join faculty, students, and alumni
from APS and Physics for a discussion on

Careers in Aerospace and Industry

Join a panel of CU alumni who have been
working in industry and aerospace who can
provide advice on securing internships and
employment without requiring advanced
study beyond your bachelor's degree.

5:00–6:00pm
March 19, 2025
Duane G1B20

Careers in Industry & Aerospace
19 March 2025, 5-6pm

Opening remarks: Mike Dubson & John Keller

Panelists

- April Olson - ASTR alum and BAE Space & Mission Systems (formerly Ball Aerospace)
- Stacey Rugenski - ASTR alum; Carma, Inc and Level 3
- Kevin Loeffler - PHYS alum, Lockheed Martin

APS/PHYS Professional Development
Michael.Dubson@colorado.edu, john.m.keller@colorado.edu,

Astrophysical & Planetary Sciences

COLLEGE OF ARTS AND SCIENCES



[Our Department](#)

[Equity](#)

[Events](#)

[Research](#)

[Graduate Studies](#)

[Undergraduate Studies](#)

[People](#)

[Home](#) > [Prospective Students](#) > Professional Development

Professional Development

APS/PHYS Professional Development is a resource for undergrads in fields related to physics and astronomy at CU Boulder. This website includes resources and information designed to help undergraduates in APS/Physics develop successful long term careers. This website is designed to offer resources and advice that will help you succeed in your career after graduating CU Boulder. Navigate with the following main sections:

Upcoming Events:

Tentative Spring Dates:

19 March, Careers in Industry, Aerospace

9 April, Careers in Startups

23 April, Applying for Jobs



Upcoming ASTR/PHYS Professional Development Events

All in G130, 5-6pm, Wednesdays – with pizza!

- 9 April: Careers in Startups
- 23 April: Applying for Jobs

ASTR/PHYS students: read your weekly emails!

Everyone: check our departmental websites

<https://www.colorado.edu/aps>

<https://www.colorado.edu/physics>



APS/PHYS Graduates - where are they now?

(Industry & Aerospace positions)

- Aerospace: BAE Systems (Ball), LM, Blue Canyon, Maxar, Blue Origin, Northrup Grumman, Sierra Space, KSAT
- Tech Sector: Quantinuum, RAND, Honeybee Robotics, L3 Harris, Meta, SciTec

April Olson

**Systems Engineer and Capture Manager,
BAE Systems SMS**



My industry path...

- Supply Chain Quality Engineer, Supply Chain Risk Management, Supply Chain Cybersecurity
- Systems Engineering: “Design, integrate, and manage ‘systems’”
- New Business - Program Capture Management, Mission Definition and Design

Disclaimer: This and the following slide are based on my own experiences. Anything I say should not be construed as the opinion or policy of BAE Systems.

April Olson

Applying to Industry



- You are your #1 advocate – speak up for yourself and be confident!
- If you feel like you don't quite meet all the qualifications for a position, apply anyways. Worst case - they say no.
- Connect with others. "People like people".
- Feeling discouraged is normal (at least it was for me) but keep going!
- It's hard. Don't give up or feel too bad about being rejected for a position.
- Your resume should be ~1 page and relate to the applied-to job.
- No job is permanent, it is good to ask in the hiring process what is the path to advancement.
- Be patient. Many things in the hiring process are very slow.

Stacey Rugenski

Platform Adoption Manager at Carma, Inc.

What's a Platform Adoption Manager?

- My job is to ensure user adoption of our software platform

How?

- Working with operations, software development, & customers
- Low-code updates to the software, supporting dev
- Designing digital training content
- Giving live Instructor Led Training sessions

Astronomy to Software Adoption?

- | | | |
|----------------------|---------------------|---------------------|
| • Coding background | • Critical Thinking | • Technical Writing |
| • Learning Assistant | • Problem Solving | • Organization |



Stacey Rugenski

My Journey Post-APS

Transition

- Observatory Assistant & Grader

Professional

- Medical office assistant 1 year
 - Small business. Sales (PEMF), calls, customers, graphic design
- Level 3 Communications 4 years
 - Big Corporate. Informal trainer, ticket monkey, bad culture
 - Skills: investigation, troubleshooting, “multi-tasking”, communication
- Carma, Inc. 7 years
 - Startup. “Poached” for a vision to resolve big telecom troubles
 - Made a specialized role for myself as the business grew and evolved



Stacey Rugenski

My Advice

Persistence

- Job hunt is a full time job
- What motivates you
- Practice interviews
- Network: know people

Know your worth

- Don't undersell yourself
- Be realistic
- Leverage every skill including hobbies

Make a place for yourself

- Be careful of “above and beyond”
- Communicate with leadership
- Never stop learning



Kevin Loeffler

Cyber R&D Engineer at Lockheed Martin Space



What's a Cyber R&D Engineer?

- Software development
- Reverse engineering
- Threat assessment
- AI

PHYS to Cyber

- Problem solving
- Machining, electronics, software skills
- Research
- Literature reviews



Kevin Loeffler

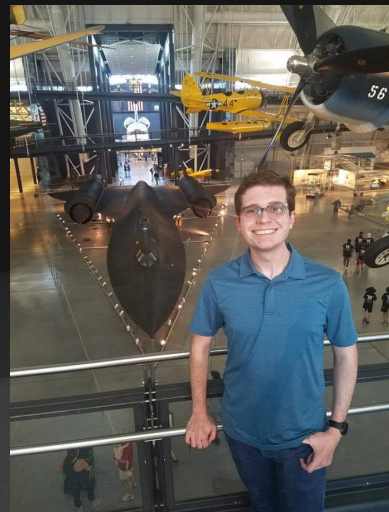
Life in the Aerospace Industry

Highlights

- Tuition reimbursement
- Conferences
- Talent development programs

Common Misconceptions

- Technology stack
- Culture
- What does the future of the industry look like?



Upcoming ASTR/PHYS Professional Development Events

All in G130, 5-6pm, Wednesdays – with pizza!

- 9 April: Careers in Startups
- 23 April: Applying for Jobs

ASTR/PHYS students: read your weekly emails!

Everyone: check our departmental websites

<https://www.colorado.edu/aps>

<https://www.colorado.edu/physics>

