

# ASTR/PHYS Professional Development

## CAREERS IN INDUSTRY & AEROSPACE

Join alums and other experts from these career paths.  
How can ASTR & PHYS majors find careers in these areas? What positions are you most qualified for?

Wednesday, March 13th

5:00-6:00pm

DUANE G130

**FREE PIZZA**

Careers in Industry & Aerospace  
13 March 2024, 5-6pm

Opening remarks: Nick Schneider & Mike Dubson

### Panelists

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

APS/PHYS Professional Development

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# Astrophysical & Planetary Sciences

COLLEGE OF ARTS AND SCIENCES



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## 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 longterm 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:

### Events for Academic Year 2023-2024

9 October, Grad school: [recording](#), [slides](#), [flyer](#)

30 October, Getting involved in Physics research: [recording](#), [flyer](#)

13 November, Careers in Heliophysics: [recording](#), [slides](#), [flyer](#)

5 December, Undergraduate Research Opportunities Symposium [recording](#), [slides](#), [flyer](#)

7 February, Careers in Telescopes, Optics and Observatories: [recording](#), [slides](#)

**Note:** All recordings can also be found [here](#)



# Upcoming ASTR/PHYS Professional Development Events

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

- 3 April: Careers in Startups
- 17 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: Ball, LM, Blue Canyon, Maxar, Blue Origin, Northrup Grumman, Sierra Space, KSAT
- Tech Sector: Quantinuum, RAND, Honeybee Robotics, L3 Harris, Meta, SciTec

# 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. 6 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

PHYS to Cyber

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





# Kevin Loeffler

## Life at Lockheed Martin

### Highlights

- Tuition reimbursement
- Conferences
- Talent development programs
  - Rising Technical Talent (RTT)
  - Engineering Leadership Development Program (ELDP)

### Common Misconceptions

- Getting/Retaining a Clearance
- Technology stack
- Culture



# April Olson

**Systems Engineer at BAE Systems SMS**



My path at BAE Systems SMS...

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

# 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.
- 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 long and relate to the applied-to job.
- No job is permanent, but also ask in the hiring process what is the path to advancement.
- Be patient. Many things in the hiring process are very slow.