

# Kyle D. Neumann

ASAS-SN Data Analyst - The Ohio State University  
neumann.110@osu.edu - neumann.kyle15@gmail.com - (302)660-6358

<https://orcid.org/0000-0002-2701-8433>

4006 McPherson Laboratory  
140 W. 18th Avenue  
Columbus, Ohio 43210

## Education

**The Ohio State University (OSU)**, Columbus, Ohio

Graduation: May 2022

*Bachelor of Science in Astronomy/Astrophysics and Physics*

*Magna Cum Laude with honors in Arts and Sciences*

**1st Major GPA (Astronomy): 3.87/4.00      2nd Major GPA (Physics): 3.86/4.00**

**Cumulative GPA: 3.89/4.00**

## Research Experience

**ASAS-SN Data Analyst**

June 2022 - present

Department of Astronomy at The Ohio State University

*Dr. Krzysztof Stanek, Dr. Christopher Kochanek, and Dr. Michael Tucker*

Group Website: <https://www.astronomy.ohio-state.edu/asassn/>

- Data analyst working for the All-Sky Automated Survey for SuperNovae
- Responsible for analyzing daily photometric data taken by twenty 14 cm telescopes located in the northern and southern hemispheres
- Responsible for daily analyses of potential transient sources continuing into naming and publishing transient candidates including cataclysmic variable stars and supernovae
- Writing and publishing the ASAS-SN 2018-2020 Bright Supernova Catalog
- Analyzing light echoes from Tycho's Supernova and Cassiopeia A

**Astronomy Undergraduate Research**

August 2020 - June 2022

Department of Astronomy at The Ohio State University

*Dr. Christopher Kochanek and Dr. Wayne Schlingman*

- Research Assistant working for the All-Sky Automated Survey for SuperNovae
- Responsible for analyzing daily photometric data taken by twenty 14 cm telescopes located in the northern and southern hemispheres
- Process and collect data from numerous sources for use in the ASAS-SN 2018-2020 Bright Supernova Catalog
- Continued during Summer of 2021 with the Summer Undergraduate Research Program

## Publications

Neumann, K. D., et al. "The ASAS-SN Bright Supernova Catalog – V. 2018-2020." arXiv preprint arXiv:2210.06492 (October 2022). MNRAS (under review)

## Coauthored Publications

Necker, Jannis, et al. "ASAS-SN follow-up of IceCube high-energy neutrino alerts." Monthly Notices of the Royal Astronomical Society 516.2 (2022): 2455-2469.

## Teaching Experience

**Undergraduate Astronomy Instructional Assistant**

Department of Astronomy at The Ohio State University

*Dr. Krzysztof Stanek*

Spring 2022

- Undergraduate IA for introduction astronomy course: Stars, Galaxies, and the Universe
- Responsible for writing and distributing daily quizzes
- Responsible for taking attendance for in class and online students
- Responsible for grading writing assignments

*Dr. Smita Mathur*

Fall 2021

- Undergraduate IA for introduction astronomy course: From Planets to Cosmos
- Help prepare homework or answers for the homework assignments
- Responsible for grading homework assignments

### **Undergraduate Physics Teaching Assistant**

Fall 2020 - Spring 2021

Department of Physics at The Ohio State University

*Dr. Gregory Kilcup*

- Undergraduate TA for Physics 2300 and 2301, Sophomore level Intermediate Mechanics
- Responsible for grading and commenting on weekly homework assignments
- Responsible for working with several groups of students on weekly group assignments
- Responsible for tutoring students on past and current assignments

## **Honors and Awards**

### **Dean's List**

Fall 2018 - Spring 2022

### **Sigma Pi Sigma National Physics Honor Society Member**

Spring 2020 - Spring 2022

### **L. Earl Slusher Scholarship**

December 2021

Scholarship is awarded to an outstanding junior or senior Astronomy major who has shown exceptional promise for going on to graduate work in Astronomy

<https://astronomy.osu.edu/undergraduates/awards-scholarships/slusher-scholarship>

### **Edward G. Mayers Scholarship**

March 2021

Scholarship for merit in natural and mathematical sciences

### **2019 Helen Cowan Book Award**

April 2019

Awarded for high achievement among freshman level undergraduate physics majors

<https://physics.osu.edu/ug-undergraduate-award-winners>

## **Talks**

### **AstroPh Talk at UH**

October 2022

Presentation of "The ASAS-SN Bright Supernova Catalog – V. 2018-2020" to the Institute of Astronomy at the University of Hawaii

### **AstroCoffee at MSU**

October 2022

Presentation of "The ASAS-SN Bright Supernova Catalog – V. 2018-2020" to the Department of Physics and Astronomy at Michigan State University

### **AstroCoffee at OSU**

October 2022

Presentation of "The ASAS-SN Bright Supernova Catalog – V. 2018-2020" to the Department of Astronomy at The Ohio State University

### **Summer Undergraduate Research Symposium**

July 2021

Presentation of summer research with ASAS-SN focusing on photometry of supernova and host galaxy data acquisition for supernova catalog

## **Skills**

### **Programming Language Experience**

C++, Python in Jupyter and Spyder, LaTeX, and Wolfram (Mathematica)

### **Operating System Experience**

Apple (macOS, iOS), Linux, and Microsoft (Windows)

### **Application Experience**

Microsoft Office and their Google counterparts

### **Public Speaking**

Presentation of research papers to students, staff, and faculty and informal talks to the public

### **Work Experience**

**Office Assistant** The Ohio State University October 2019 - October 2020

- Front desk staff member at a university residential dorm
- Assist students and other staff members on a daily basis
- Manage dorm postal services including mail and packages
- Train future office assistants at the beginning of the hiring season

### **Leadership and Activities**

**Friends of Ohio State Astronomy and Astrophysics Volunteer** October 2022

- Assist in running a planetarium show and public lecture
- Greet and inform attendees about the format and organization of the event

**OSU Archery Team Officer (Website Manager)** Fall 2019 - Spring 2022

- Collegiate archery team member starting in Fall 2018
- Manage and keep the Archery Club's website up to date
- Aid in the organization and operation of the 2020 Ohio State Indoor Archery Tournament
- Help run weekly practices

**The Astronomical Society at The Ohio State University** Fall 2018 - Spring 2022

**Society of Physics Students and Sigma Pi Sigma** Fall 2018 - Spring 2022

**Public Stargazing Parties** 5x 2018 - 2020

- Presenrat information on visible moons, planets, and stars while operating telescopes during The Astronomical Society's public stargazing parties at OSU

### **References**

*Dr. Christopher Kochanek* - Research Advisor

Professor, Ohio Eminent Scholar

[kochanek.1@osu.edu](mailto:kochanek.1@osu.edu)

*Dr. Krzysztof Stanek* - Research Advisor

Professor, University Distinguished Scholar

[stanek.32@osu.edu](mailto:stanek.32@osu.edu)

*Dr. Wayne Schlingman* - Undergraduate Astronomy Mentor

Director, Arne Slettebak OSU Planetarium, Director of Undergraduate Studies

[schlingman.4@osu.edu](mailto:schlingman.4@osu.edu)