

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/>

- Research Assistant working for the All-Sky Automated Survey for SuperNovae
- Responsible for quality control of nightly images 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

- Responsible for quality control of nightly images 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

Teaching Experience

Undergraduate Astronomy Instructional Assistant

Department of Astronomy at The Ohio State University

Dr. Krzysztof Stanek

January 2022 - April 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

August 2021 - December 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

September 2020 - April 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

Publications

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

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

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

- Present 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

kochanek.1@osu.edu

Dr. Krzysztof Stanek - Research Advisor

stanek.32@osu.edu

Dr. Wayne Schlingman - Undergraduate Astronomy Mentor

schlingman.4@osu.edu