Kyle D. Neumann

ASAS-SN Data Analyst - The Ohio State University neumann.110@osu.edu - neumann.kyle15@gmail.com - (302)660-6358 Professional Website: <u>https://kyleneumann.github.io/</u>

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

Education

The Ohio State University (OSU), Columbus, Ohio

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

Department of Astronomy at The Ohio State University Dr. Krzysztof Stanek, Dr. Christopher Kochanek, and Dr. Michael Tucker

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

- 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

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

Graduation: May 2022

June 2022 - present

August 2020 - June 2022

Astronomy 1144

- 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

Astronomy 1102

- 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

Department of Physics at The Ohio State University

Dr. Gregory Kilcup

Physics 2300/2301

- 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

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	
SKIIIS Decomenting Longuage Experience	

Programming Language Experience

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

Fall 2021

Fall 2020 - Spring 2021

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** 2018 - 2020 5x • Presengrat 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

Dr. Krzysztof Stanek - Research Advisor Professor, University Distinguished Scholar <u>stanek.32@osu.edu</u>

Dr. Wayne Schlingman - Undergraduate Astronomy Mentor Director, Arne Slettebak OSU Planetarium, Director of Undergraduate Studies <u>schlingman.4@osu.edu</u>