

DR. JENNIFER SIEBEN

<https://jsieben7.github.io/>* JSieben@iwu.edu* <https://www.linkedin.com/in/jennifersieben/>

ASTRONOMER AND SCIENCE WRITER

Creatively minded astronomer with over a decade of verbal and written science communication experience through academic papers, public talks, teaching, and written articles for an audience of physicists. Demonstrated track record in astronomy research and project management. Strengths include social media, video production, and data presentation. Expertise includes: data analysis, writing, and collaboration. Equally comfortable solving creative or scientific problems and using skills from multiple disciplines to arrive at a solution. Adept at thinking of visual presentation methods, adapting to unpredictable observing conditions, and using color-coded spreadsheets for project management. Other skills include website design, comfort speaking to camera, and photography.

PROFESSIONAL SKILLS

Computer Languages	Python IRAF HTML CSS SQL
Computer Software	Google Drive Suite MS Office Suite Adobe Creative Suite L ^A T _E X
	Pinnacle Studios Video Editing monday.com Canva Audacity
Social Media	Sprout Social Bluesky Twitter/X LinkedIn Instagram Facebook

EXPERIENCE

American Institute of Physics, *Physics Today*, College Park, MD 2023—2025
Associate Editor

Wrote and edited articles for AIP's flagship magazine (a circulation of 150,000 copies worldwide) covering physics-related topics such as recent research, niche topics, and community experiences for an audience of physicists. Managed the revitalization of *Physics Today*'s social media presence.

- Collaborated with internal editors, external subject-matter experts, and the visual experience department to create articles of varying lengths for both the website and the print magazine.
- Wrote over 40 articles of varying lengths and edited 12 feature articles by external authors in addition to other editing of shorter articles.
- Launched Instagram (2.2k followers) and Bluesky (1.4k followers) accounts to reach a new audience. Began posting on LinkedIn and increased posting frequency on Facebook and X.
- Developed workflow for social media posts using monday.com to facilitate collaboration and encourage accountability across the editorial staff. Balanced promotion of recent articles against articles from the archives to respond to trends and public events.
- Developed guidelines for the use of alt text to increase accessibility.

Indiana University, Bloomington, IN 2016—2022
PhD candidate

Contributed to the establishment, data collection, and analysis of a multi-wavelength survey with the WIYN 3.5m telescope to determine the star formation of galaxies across cosmic time using photometric and spectroscopic data. The survey uses broad- and narrow-band filters to discover faint, point-like sources. In addition, served as the outreach coordinator and taught online classes to non-majors.

- Scheduled data collection at the telescope and adapted in real time to complications such as weather.
- Presented research results via conference posters, talks, and peer-reviewed papers.
- Managed a multi-year research project to collect data, manage data, and develop scripts in a timely manner.
- Awarded the Indiana Space Grant PhD Fellowship twice and the College of Arts and Sciences Dissertation Research Fellowship to support the ongoing research project.
- Taught three online courses which involved redesigning one astronomy course and co-designing one course on science communication. Awarded the Frank & Margaret Edmondson Prize for Teaching.

Co-Editor-at-Large

Wrote for (6 years) and managed (4 years) a peer-edited science blog that publishes weekly articles covering science news, ongoing research, and interviews with university professors.

- Developed material to teach science communication in a digital age with other blog staff. This included multiple talks given at events and in classrooms as well as a month-long online course taught through the university.
- Led bi-monthly meetings of the blog staff to brainstorm article topics, organize outreach efforts, and improve writing skills. Collected and managed guest submission of articles.
- Managed the blog's social media account. This included posting about new articles, interacting with other science accounts, and creating content exclusive to social media.
- Organized three science communication symposia, bringing in guest speakers and leading workshops for a day of learning open to the campus community.

Indiana University, Astronomy Department

2019—2020

Outreach Coordinator

Led the department's outreach efforts and coordinated volunteers for a wide variety of talks, events, and weekly open house events with our observatory. Was a member of the annual, campus-wide Science Fest organizing committee. Revitalized the department's twitter account. In partial recognition of this, I was twice awarded the Goethe Link Prize for Outreach and Public Education in Astronomy.

ASTRONOMY OUTREACH AND TEACHING

Astronomy Public Outreach, Indiana and Illinois Wesleyan Universities

2014—2022

Led public observing tours at campus observatories, led astronomy sessions at local public school events, volunteered at campus wide Science Fest (IU), organized lunar eclipse party attended by ~100 people (IWU).

“AST-A 107: The Art of Astronomy: Images of the Universe”

2018, 2021

Taught an online course focused on astrophotography and how to use artistic principles to convey scientific data. Teaching included updating course materials, filming tutorials, and assessing the understanding of the students.

“COLL-X 311: Science Communication in a Digital Age”

2020

Designed and co-taught an online class covering how to evaluate audience, plan a scicomm post, how to edit a post, how to find or create relevant graphics, and how to promote it on social media. As part of this, I wrote and recorded video lectures and evaluated student assignments. Students all created a blog post with associated social media and some have gone on to be published on SciU.

Intern at Adler Planetarium

Summers 2013, 2015, 2016, Spring 2017

Led public tours at Adler Planetarium's Doane Observatory with solar observing and monthly nighttime observing sessions accompanied by short presentations about astronomy. Also assisted in the Space Visualization Lab.

OTHER RELEVANT EXPERIENCE

Online community moderator

2017—Present

Co-lead a community of people around the world. This involves designing and running multiple creative events per year (ranging from 3 weeks to 4 months long) in addition to monthly prompts, weekly asynchronous events, and community organized gatherings.

- Regularly create linked spreadsheets to manage community resources and maintain a Wordpress website.
- Manage Slack and Discord channels for a community of 300 people in ~14 time zones.
- Design banners art and other visual elements for promotion of events in addition to the overall look of the website using HTML and CSS.

Personal YouTube channel

2010—Present

In addition to various personal vlogs, my YouTube channel hosts 44 videos documenting my life as an astronomer. Topics include experiences at an observatory, attending conferences, and remote observing runs. The most popular astronomy video has 5.9k views.

Public talks and interviews

- “Reaching Beyond the Stars” Bays Mountain StarFest *2018*
- “Oven Baked Galaxies” Public Science Symposium 2021, Indiana University *2021*
- “Star Formation Across Cosmic Time (SFACT) survey” AAS Dissertation talk *2023*
- “Observational Astronomy” Lake County Astronomical Society *2023*
- “The Latest in Heliophysics” Lake County Astronomical Society *2024*
- “#57 - The Universe’s Newborn Stars” Starts With a Bang. *2020*

EDUCATION

Ph.D., Astronomy , Indiana University, Bloomington, IN	2022
B.A., Physics , Illinois Wesleyan University, Bloomington, IL	2016