JENNIFER SIEBEN

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EDUCATION

Indiana University, Ph.D., Astronomy Illinois Wesleyan University, B.A., Physics December 2022

May 2016

SCIENCE WRITING AND ASTRONOMY OUTREACH

Associate Editor, Physics Today

2023-2025

Wrote and edited articles of various lengths for print and online. Subjects included recent research news, educational developments, and topic-specific articles, all related to physics. Also led the revitalization of *Physics Today*'s social media presence, launching on LinkedIn, Instagram, and Bluesky.

ScIU blog - https://sciu.indiana.edu/

2016-2022

A graduate-student run, peer-edited science blog which publishes weekly articles covering science news, ongoing research, and interviews with IU professors. Member for 6 years, co-Editor-at-Large for 4 years.

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), served as department outreach coordinator for 2 years (IU), revitalised IU Astro twitter account.

"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.

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

2018. 202

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.

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.

RESEARCH EXPERIENCE

Graduate Research Assistant, Indiana University

2016 - 2022

Advisor: John Salzer

Survey with the WIYN 3.5m telescope to determine the star formation of galaxies across cosmic time using photometric and spectroscopic data. This survey uses broad and narrowband filters to discover faint point-like sources.

Undergraduate Research Assistant, Illinois Wesleyan University

Summer 2014

Advisor: Linda French

Observations of Trojan asteroids with the Cerro Tololo 0.9m telescope to determine rotation periods in order to discover a spin barrier and a limit of the density for comparison with cometary nuclei.

PROFESSIONAL SKILLS

Computer Languages Python, IRAF, HTML, CSS, and SQL

Computer Software Knowledge Google Drive Suite, MS Office Suite, Adobe Creative Suite,

LATEX, Pinnacle Studios Video Editing, monday.com, Audacity,

Mathematica, Canopus, and IgorPro

PROFESSIONAL SOCIETIES

American Astronomical Society

Member

SPIE - International Society of Optics and Photonics

Member, 2014—2016

REFEREED PUBLICATIONS

- 1. French, L. M., Stephens, R. D., Coley, D., Wasserman, L. H., and **Sieben, J**., "Rotation lightcurves of small jovian Trojan asteroids", *Icarus*, vol. 254, pp. 1–17, 2015.
- Salzer, J. J., Carr, D. J., Sieben, J., et al., "The Star Formation Across Cosmic Time (SFACT) Survey.
 I. Survey Description and Early Results from a New Narrow-Band Emission-Line Galaxy Survey", 2023 AJ 166 81.
- 3. Sieben, J., Carr, D. J., Salzer, J. J., et al., "The Star Formation Across Cosmic Time (SFACT) Survey. II. The First Catalog of Targets from a New Narrow-Band Survey for Emission-Line Objects", 2023 AJ 166 101.
- 4. Carr, D. J., Sieben, J., Salzer, J. J., et al., "The Star Formation Across Cosmic Time (SFACT) Survey. III. Spectroscopy of the Initial Catalog of Emission-Line Objects", 2023 AJ 166 102.

CONFERENCE POSTERS

- 3. Brucker, M. J., Nault, K. A., Hammergren, M., **Sieben, J**., Gyuk, G., Solontoi, M. R. 2015. Preliminary Light Curve Results of NEOs from the Characterization and Astrometric Follow-Up Program at Adler Planetarium. AAS/Division for Planetary Sciences Meeting Abstracts #47 307.07.
- 2. **Sieben, J.**, Salzer, J., Carr, D. J. 2019. The SFACT Survey Star Formation Across Cosmic Time. American Astronomical Society Meeting Abstracts #233, 144.04.
- 1. Sieben, J., Salzer, J., Van Sistine, A., Gronwall, C. 2020. Luminosity Functions Derived from Three Distinct Emission Line Selected Galaxy Samples. American Astronomical Society Meeting Abstracts #235, 208.06.

TALKS

"Reaching Beyond the Stars" Bays Mountain StarFest	October 2018
"Oven Baked Galaxies" Public Science Symposium 2021, Indiana University	June 2021
"Star Formation Across Cosmic Time (SFACT) survey" AAS Dissertation talk	January 2023
"Observational Astronomy" Lake County Astronomical Society	Feburary 2023
"The Latest in Heliophysics" Lake County Astronomical Society	July 2024

MEDIA

Siegel, E. Interviewee. "#57 - The Universe's Newborn Stars" Starts With a Bang. 2020 June.

AWARDS

Frank & Margaret Edmondson Prize for Teaching	April 2021
College of Arts and Sciences Dissertation Research Fellowship $\$$ $20{,}000$	2020—2021
IUB Provost's Travel Award for Women in Science	Fall 2018, Fall 2019, Fall 2021
College of Arts and Sciences Travel Award	Fall 2019
Indiana Space Grant PhD Fellowship \$ 12,000	2018—2019, 2019—2020
Goethe Link Prize for Outreach and Public Education in Astronomy	May 2019, April 2020

Last updated: May 12, 2025