

CURRICULUM VITAE – KRISTIN N. BAKER

CONTACT INFORMATION	Kristin N. Baker Indiana University 727 East Third Street Bloomington, IN 47405-7105	knb1@iu.edu
EDUCATION	M.A. in Astronomy , Indiana University Advisor : John Salzer B.S. in Physics , Georgia State University	Anticipated Aug. 2024 Dec. 2020
RESEARCH INTERESTS	Extragalactic astronomy : emission-line galaxies, chemical abundances, star formation, starburst galaxies, Green Pea galaxies	
AWARDS	Executive Dean's Travel Award for Women in Science (2024) Goethe Link Prize for Outreach and Public Education in Astronomy (2024) Goethe Link Prize for Outreach and Public Education in Astronomy (2023) Provost's Travel Award for Women in Science (2023) Indiana University College of Art and Science Travel Award (2023)	\$650 \$500 \$200 \$700 \$200
RESEARCH EXPERIENCE	Chemical Abundances of Green Pea Galaxies , <i>Indiana University</i> Advisor : John Salzer Study of the properties of Green Pea galaxies in the Star Formation Across Cosmic Time (SFACT) survey and their chemical abundances.	Jan. 2024 - Present
	Star Formation Across Cosmic Time (SFACT) , <i>Indiana University</i> Advisor : John Salzer Narrow-band survey utilizing the WIYN 3.5m telescope at Kitt Peak Observatory to detect emission line galaxies out to a r magnitude of $r = 25.0$.	Jan. 2022 - Present
	Study of Outflowing Material in NGC 3783 , <i>Georgia State University</i> Advisor : Jay Dunn Investigation of the variability of CIV and NV absorption in AGN over time and analysis of trough blending due to multiple kinematic components.	Jul. 2019 - Jul. 2021
	Rotational Periods of 782 Montefiore , <i>Georgia State University</i> Advisor : Misty Bentz Study of the rotational period of Asteroid 782 Montefiore utilizing V-band photometry taken with the 24in telescope at Hard Labor Creek Observatory.	Jan. 2020 - May 2020
TEACHING EXPERIENCE	Instructor of Record , <i>Indiana University</i> A105 : Stars and Galaxies A 3-credit online introductory astronomy course for non-science majors with a class size of 30 students. Responsibilities included creating homework assignments and discussion prompts, grading assignments, and holding office hours.	Summer 2023
	Associate Instructor , <i>Indiana University</i> A222 : Stars and Galaxies A 3-credit online introductory astronomy course for science and astronomy majors with a class size of 20 students. Responsibilities included grading weekly assignments, holding office hours, and proctoring exams.	Fall 2021 - Spring 2023

A221 : Stars and Galaxies

A 3-credit online introductory astronomy course for science and astronomy majors with a class size of 30 students. Responsibilities included grading weekly assignments and holding office hours.

A107 : The Art of Astronomy

A 3-credit online introductory astronomy course for non-science majors with a class size of 150 students. Responsibilities included grading weekly assignments and holding office hours.

OUTREACH
EXPERIENCE

Eclipse Coordinator, Indiana University

Jul. 2023 - May 2024

Coordination of outreach and education efforts regarding the 2023 Partial Eclipse and 2024 Total Eclipse. Responsibilities include giving public talks and guest lectures, coordinating events leading up to and on the day of the total eclipse, serving on committees distributing financial aid to rural Indiana communities planning eclipse events.

BVI Outreach Intern, Geneva Lake Astrophysics and STEAM

Mar. 2021 - Aug. 2021

Developed a 3D-printed tactile card game designed to teach students with visual impairments about galaxy shape and associated spectra with Sloan Digital Sky Survey data.

SKILLS

Programming Languages

Python, LaTeX, IDL, Java

Softwares

IRAF, TOPCAT, Blender

POSTER
PRESENTATIONS

The Many Faces of the Tactile Galaxy Cards. Presented at : 241th American Astronomical Society Conference ; January 2023 ; Seattle, WA

Continuing Evolution of Outflows in NGC 3783. Presented at : American Physical Society Conference for Undergraduate Women in Physics ; January 2020 ; Norman, OK

Continuing Evolution of Outflows in NGC 3783. Presented at : Georgia Regional Astronomy Meeting ; October 2019 ; Atlanta, GA

PUBLICATIONS

Refereed Publications :

Bentz, M., **Baker, K.**, Coumarbatch, K. et al., "V-Band Photometric Monitoring of 782 Montefiore," Minor Planet Bulletin, Vol 49, No. 4

Non-refereed Publications :

Meridith, K., **Baker, K.**, Corbett, K., Smithmier, O., "Tactile Galaxy Cards : A New Accessible Hands-on Tool for Teaching," AAS Education Committee Blog, 2022