

Laura B. Chomiuk

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Education: —————

Ph.D. in Astronomy	2010
University of Wisconsin–Madison “ <i>Supernova Remnants Across the Hubble Sequence</i> ” advised by Prof. Eric M. Wilcots	
M.S. in Atmospheric & Oceanic Sciences	2006
University of Wisconsin–Madison	
B.A. in Astronomy and Physics	2003
Wesleyan University, High Honors in Astronomy	

Appointments: —————

Professor, Michigan State University (MSU)	2023–Present
Associate Professor, MSU	2018–2023
Assistant Professor, MSU	2013–2018
Jansky Fellow, National Radio Astronomy Observatory (NRAO) Resident at the Harvard-Smithsonian Center for Astrophysics and MSU	2010–2013
Visiting Scientist, NRAO EVLA Shared Risk Observing and Commissioning	2010
Graduate Student Researcher, University of Wisconsin–Madison and University of California–Santa Cruz	2003–2010

Awards: —————

College of Natural Science Postdoctoral Mentoring Award	2023
Cottrell Scholar, Research Corporation for Science Advancement	2017–2020
MSU Teacher-Scholar Award	2019
Thomas H. Osgood Excellence in Teaching Award	2015, 2019
College of Natural Science Teacher-Scholar Award	2018
College of Natural Science Undergraduate Teaching Award	2018
Scialog Fellow, Research Corporation for Science Advancement	2015–2016
NRAO Jansky Fellowship	2010–2013
NSF Graduate Research Fellowship	2005–2008
University Scholar, Wesleyan University	1999–2003
Littell Prize in Astronomy, Wesleyan University	2003

Grant Funding (Amounts to MSU): _____

<i>Understanding the Gamma-Ray Production Mechanism in Nova Shocks</i> NASA/NuSTAR (co-PI w/ K. Sokolovsky)	(2023–2024) \$92,449
<i>Bolometric Light Curves for a Large, Diverse Sample of Novae: Supersoft Sources, Shocks, and Super-Eddington Luminosity</i> NASA Astrophysics Data Analysis Program (co-PI w/E. Aydi)	(2023–2026) \$437,305
<i>Collaborative Research: Charting the Supernova-Gas-Stars Connection via a Major New VLA Survey of the Local Group</i> NSF Astronomy & Astrophysics Research Grant (co-PI w/ J. Dalcanton, A. Leroy, & S. Stanimirovic)	(2022–2025) \$322,258
<i>Combining Observations with Simulations to Decipher Shocks in Novae</i> NASA Hubble Fellowship (institutional host for E. Aydi)	(2022–2024) \$271,803
MSU Discretionary Funding Initiative MSU & NatSci	(2022–2023) \$49,543
AGEP Supplement to <i>Constraining Type Ia Supernova Progenitors via their Environments</i> NSF Supplement (co-PI w/ C. Harris)	(2022–2023) \$65,453
Student Observing Support NRAO	(2022–2023) \$33,900
<i>Constraining Type Ia Supernova Progenitors via their Environments</i> NSF Astronomy & Astrophysics Research Grant (co-PI w/ C. Harris)	(2021–2024) \$459,239
<i>Towards a Universal Scenario for Shock Formation in Novae</i> NASA/Fermi Gamma-Ray Observatory (co-PI w/ E. Aydi)	(2020–2021) \$60,000
<i>Understanding the Gamma-Ray Production Mechanism in Nova Shocks</i> NASA/NuSTAR (co-PI w/ K. Sokolovsky)	(2020–2022) \$70,591
<i>In Search of Shocks: Monitoring Novae with Swift</i> NASA/Swift Observatory (co-PI w/ E. Aydi)	(2020–2021) \$37,900
<i>The Progenitors of Type Ia Supernovae: New Insights from Radio Observations</i> NSF Astronomy & Astrophysics Research Grant (PI)	(2019–2022) \$341,588
<i>Understanding the Gamma-Ray Production Mechanism in Nova Shocks</i> NASA/NuSTAR (co-PI w/ K. Sokolovsky)	(2018–2019) \$42,641
<i>Fermi ToO Observations of Bright Galactic Novae</i> NASA/Fermi Gamma-Ray Observatory (co-PI w/ E. Aydi)	(2018–2019) \$55,000
<i>CAREER: Understanding Novae as Shock-Powered Explosions</i> NSF CAREER Grant (PI)	(2018–2023) \$730,425
<i>Rethinking the Fundamentals of Novae</i> Research Corporation for Science Advancement (PI)	(2017–2020) \$100,000
<i>Finding AM CVn Stars in 47 Tuc</i>	(2017–2020)

NASA/ <i>Hubble Space Telescope</i> (coI w/PI T. Maccarone)	\$9,843
<i>Identifying the Nature of a Peculiar Globular Cluster X-ray Binary</i> NASA/ <i>Chandra X-ray Observatory</i> (coI w/PI V. Tudor)	(2017–2019) \$10,000
<i>Accretion at the Lowest Luminosities Revealed by the Stellar-Mass Black Hole GS 2000+25</i> NASA/ <i>Chandra X-ray Observatory</i> (PI)	(2017–2019) \$40,485
<i>The Formation and Evolution of Black Holes in the Era of Multi-Messenger Astronomy</i> NRAO (co-PI w/ T. Maccarone)	(2017–2018) \$14,800
<i>The Black Hole Population in Galactic Globular Clusters</i> NASA/ <i>Hubble Space Telescope</i> (PI)	(2016–2019) \$24,537
<i>Catching the Emergence of a Supernova Years After the Gamma Ray Burst</i> Research Corporation for Science Advancement (co-PI w/D. Giannios)	(2016–2018) \$50,000
<i>The Black Hole Population in Galactic Globular Clusters</i> NASA/ <i>Chandra X-ray Observatory</i> (PI)	(2016–2018) \$87,610
<i>The Supernova Rate and Delay Time Distribution in the Local Group</i> NSF Astronomy & Astrophysics Research Grant (co-PI w/C. Badenes)	(2014–2018) \$268,609
<i>CHILES VERDES: The Transient Radio Sky at Incomparable Depth</i> NSF Astronomy & Astrophysics Research Grant (PI)	(2014–2018) \$262,103
<i>Tempest, Not Bombs: The Complex, Prolonged Explosions of Novae</i> NASA/ <i>Fermi Gamma-Ray Observatory</i> (PI)	(2014–2017) \$182,814
<i>A Black Hole in the Galactic Globular Cluster M62</i> NASA/ <i>Chandra X-ray Observatory</i> (PI)	(2014–2017) \$52,079

National and International Committees ---

National Academies' Committee on Radio Frequencies	2021–Present
Decadal Survey on Astronomy and Astrophysics 2020 Science Panel on Compact Objects and Energetic Phenomena	2019–2020
Science Advisory Council for Next Generation Very Large Array (ngVLA) Including editing the ngVLA Science Book	2016–2021
Working Group on Time Domain Astronomy of the American Astronomical Society	2017–2020
<i>Fermi Gamma-Ray Space Telescope</i> Users Group	2015–2019
NRAO Users Committee (Deputy Chair in 2015, Chair in 2016)	2013–2016
NRAO Science Review Panel	2014–2015, 2017, 2018
<i>Fermi</i> Proposal Review Panel	2016
<i>Chandra X-ray Observatory</i> Time Allocation Committee	2015
NRAO Committee on Proposal Review and Time Allocation	2014
Hubble Fellow Selection Committee	2014

NSF Astronomy & Astrophysics Grants Review Panel
 NSF Astronomy & Astrophysics Postdoctoral Fellowship Panel
 NSF Major Research Instrumentation Panel
 NSF CAREER Grant Review Panel

MSU Service

Director of MSU Campus Observatory	2013–Present
Co-director of the MSU Observatory Research Program (MORP)	2016–Present
MSU Site Director for the National Astronomy Consortium (NAC)	2019–Present
Director of Physics & Astronomy Research Experiences for Drew Scholars (PAREDS)	2020–Present
Physics & Astronomy Advisory Committee to the Chair (ADCOM)	2018–2020, 2022–Present
Mentor to Astronomy Faculty/Instructors: Ehab Ahmed (2019–2020), Wolfgang Kerzendorf (2022–Present)	
Faculty Advisor to Astronomy Outreach Group	2022–Present
Chair of Search Committee for Astronomy Faculty Hire	2019–2020, 2023–Present
Search Committee for director of the Drew Scholars Program	2022–2023
Physics & Astronomy Promotion, Tenure, and Review Committee	2022–2023
Search Committee for Astronomy Instructor	2018, 2019, 2022
NatSci Strategic Planning Working Group for Undergraduate Education	2019
Director of Undergraduate Astrophysics Major	2018–2020
Physics & Astronomy Colloquium Committee	2018–2020
Faculty Advisor to the MSU Astronomy Club	2013–2020
MSU Thesis Committees for non-advisee grad students	
I. Herzog & J. Schulte	2023–Present
J. Shields	2022–Present
L. Shishkovsky, J. Surbrook, & C. Teh	Ph.D. 2023
D. Douglas, M. Grinder, & C. Kopenhafer	2022
A. Peisker	2021
K. Dage, T. Poxon-Pearson & S. Swihart	2020
R. Connolly, C. Fry, & D. Votaw	2019
M. Bennett & A. Deibel	2016
Author of the Strategic Plan for the PA Astronomy Group	2019
Committee for a Strategic Plan on Diversity, Equity and Inclusion for Physics and Astronomy	2019
Organizer of Astronomy Seminars	2013–2015, 2018–2019
Physics & Astronomy Committee on Diversity	2016–2019
Undergraduate Program Committee	2013–2018
Ad Hoc Committee on STEM Laboratories	2014–2018

Ad Hoc Committee on a Departmental Teaching Strategic Plan	2017–2018
Search Committee for Particle Astrophysics Faculty Hire	2017–2018
Panelist at the NatSci Grant Writing Workshop for New Faculty	2018
Faculty Grievance Appeal Panel	2015
Search Committee for Nuclear Astrophysics Faculty Hire	2014–2015
Search Committee for Cowen Chair in Condensed Matter Physics	2013–2014

Conferences Organized

SOC for <i>Compact White Dwarf Binaries</i> Conference	2019
SOC for <i>Midwest Workshop on Supernovae and Transients</i>	2019
Co-chair of conference, <i>Astrophysical Frontiers in the Next Decade</i>	2018
SOC for European Week of Astronomy and Space Science session on novae	2018
SOC for conference, <i>Asymmetric Planetary Nebulae 7</i>	2017
Co-chair for conference, <i>Stellar Remnants at the Junction</i>	2016
SOC for <i>International Workshop on Shocks and Particle Acceleration in Novae and Supernovae</i>	2016
SOC for Aspen Workshop on <i>Black Holes in Star Clusters</i>	2015
SOC for <i>Type Ia Supernovae: Progenitors, Explosions, and Cosmology</i> Conference	2014
Organizer for <i>Compact Objects in Michigan</i> Conference	2014
Organizer for NRAO Postdoc Symposium	2012
Co-Chair of <i>Radio Astronomy and the Interstellar Medium</i> Conference	2010

Current Publication Summary:

Link to Citation Account in Google Scholar:

http://scholar.google.com/citations?user=_gN33xkAAAAJ

194 refereed articles (14 first author)

378 non-refereed articles (Astronomer's Telegrams, submitted pre-prints, etc.)

10,390 citations, h-index 56

Courses Taught

AST 208: <i>Planets and Telescopes</i>	S2014, S2015, S2016, S2018, S2019, S2020
ISP 205L: <i>Visions of the Universe Lab</i>	F2016, F2018, S2020*, F2021, S/F2022, S/F2023, S2024
AST 207: <i>The Science of Astronomy</i>	F2019
ISP 205: <i>Visions of the Universe</i>	F2014

*: Took over the course partway through the semester.

Outreach Activities (since 2013):

Organizer of monthly public nights at MSU Observatory ~50–200 people in attendance on typical evening	2013–Present
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Organizer of special-event nights at MSU Observatory for Alumni Weekends, 4H, summer schools, school groups, etc.	2013–Present
Organizer of International Observe the Moon Night at MSU Observatory ~200–400 people in attendance at each annual event	2015–Present
Leader of Statewide Astronomy Night at MSU Observatory ~200–400 people in attendance at each annual event	2015–Present
Astronomical Horizons Public Lectures at the Abrams Planetarium Also scheduled the series (2018–2020)	2013–2020
Organizer of Observatory Collaborations with Howell Nature Center Including “Nature Nights” at MSU Observatory	2018–2020
Presenter at Astronomy on Tap, Lansing, MI	2016, 2019
Leader of Perseid Party at Cory Marsh Natural Area	Aug 2018
Organizer of Closest-Approach-of-Mars Night ~400 people in attendance	2018
Leader of astronomy session at 4H Exploration Days	2018
Organizer of Solar Eclipse Party ~500 people in attendance	2017
Co-Leader of Astronomy event at the Science Olympiad State Finals	2013–2015
Interviewee for Kavli Roundtable on Progenitor Systems of Type Ia Supernovae	2015
Docent at Physics & Astronomy Day, Impression 5 Museum	2015
Leader of Aspen Physics Café	2015
Interviewee for NASA Blueshift public blog	2014
Presenter at University of Toronto AstroTour	2014
Presenter at the <i>Nuclear Astrophysics</i> MST Summer School	2014
Public Talk, Ann Arbor Lowbrow Astronomers	2014
Presenter at the <i>Physics of Atomic Nuclei</i> Summer Schools	2013
Physics Colloquium for MSU REU Students	2013

Other Service: _____

Telescope Proposal Selection: GMRT, CFHT, <i>HST</i>	2012–Present
Referee for <i>AAS Journals</i> , <i>Nature</i> , <i>Science</i> , <i>Monthly Notices of the Royal Astronomical Society</i>	2010–Present
Career Panelist at the NRAO Postdoc Symposium	2015
Leader of weekly arXiv journal club for MSU astronomy group	2013–2014
NSF Mid-Scale Innovations Project (MSIP) Reviewer	

Postdoctoral Researchers Supervised or Co-supervised _____

Peter Craig	2023–Present
Chelsea Harris	2020–Present
Elias Aydi	2018–Present

Ryan Urquhart	2018–Present
Esha Kundu	2021–2023
Kirill Sokolovsky	2018–2022
Sumit Sarbadhicary	2018–2021
Ray Li	2015–2018
Arash Bahramian	2016–2018
Chris Britt	2016–2018
Evangelia Tremou	2015–2017
Justin Linford	2013–2016

Ph. D. Students Supervised or Co-supervised —————

Isabella Molina (MSU)	Graduating ~2026
Teresa Panurach (MSU; co-advised w/J. Strader)	Graduated 2023
Adam Kawash (MSU)	Graduated 2022
Miriam Nyamai (U Cape Town; ; co-advised w/P. Woudt & V. Ribeiro)	Graduated 2021
Charee Peters (Wisconsin; co-advised w/E. Wilcots)	Graduated 2019
Sumit Sarbadhicary (U Pitt; co-advised w/C. Badenes)	Graduated 2018
Thomas Finzell (MSU)	Graduated 2017

M.S., Undergraduate, and High School Students Supervised or Co-supervised

★ signifies that I advised their senior capstone experience.

† signifies that the student is an author on a refereed publication that emerged from the research experience.

Hailey Moore	2021–2023; M. S.
Jessica Maldonado	2016–2019; M. S.
Danny Huizenga	2014–2017; M. S.
Kyndrel Allen	2023–Present
Alexis Arndt	2023–Present
Brandon Grimes	2023–Present
Colin Hogan	2023–Present
Connor Lefebvre	2023–Present
Subhroja Roy	2023–Present
Cameron See	2023–Present
Grace Showerman	2023–Present
Jadyn Waggoner	2023–Present
Caitlyn Gerhard	2022–Present
David-Michael Peterson	2022–Present
Atticus Chong ★	2021–Present

Ashley Stone ★	2021–Present
Levi Webb	2021–Present
Jeremy Fedewa †	2022–2023
Kate Townley	2022–2023
Wasundara Athukoralalage	2021–2023
Matt Bartnik †	2021–2023
Emma Dugan	2021–2023
Shane Painter	2021–2023
Hannah Sullivan	2021–2023
Payton Walton	2021–2023
Sarah Watson	2019–2023
Michael Bellaver	2021–2022
Vincenzo Donofrio	2021–2022
Miranda Pikus	2021–2022
Jessica Ranshaw †	2021–2022
Lauren McDermott †★	2020–2022
Jennifer Rodriguez †	2019–2022
Cameron Blochwitz †★	2019–2021
Samantha Gunter	2019–2021
Jessie Miller	2019–2021
Evan Zobel †	2019–2021
Alessandro Dellarovere ★	2019–2020
Mira Ghazali	2019–2020
Jesse Leahy-McGregor †	2019–2020
Pranav Nalamwar	2019–2020
Courtney Wicklund	2019–2020
Brandon McIntyre	2019
Ibrahim Shawki	2019
Jasmin Washington	2019
Nathaniel Berry	2018–2020
Christina Conner	2018–2020
Trevor Franklin	2018–2020
Alexa Gordon †★	2018–2021
Barrett Ross	2018–2020
Brendan Boyd	2018–2019
Gavin Wilks	2018–2019
Lucas Peggau	2018

Aalayah Spencer	2018
Ryan Smith	2018
Colin Davis	2017–2020
Megan Davis	2017–2020
Matt Bundas	2017–2019
Hannah Gallamore *	2017–2019
Dylan Mankel	2017–2019
Omid Noroozi	2017–2019
Hazirah Sanani*	2017–2019
Joe Adams	2017–2018
Megan Campbell	2017–2018
Jacob Crosby	2017–2018
Larissa Kennerley	2017–2018
Katie Schram	2017–2018
Luke Van Ess	2017–2018
Joey Seitz	2016–2019
Emily Washington	2016–2019
Jonathan Semeyn *	2016–2018
Bradley Frink	2016–2018
Pranit Vengsarkar	2016–2018
Daniel Coulter †*	2015–2018
Huei Sears	2015–2018
Matt Marshall	2017–2018
Luis Bariuan	2018
Matthew Floyd	2018
Cielo Medina	2018
Anja Chivukula	2016–2017
Felicia Minott	2016–2017
Eric Kopins	2015–2017
Brian Luke	2015–2017
Pham Nguyen	2015–2017
John Owens	2015–2017
Dustin Scriven *	2015–2017
Seth Bruzewski †	2014–2017
Jessica Martin	2014–2017
Austin Silcox *	2014–2017
Autumn Cain	2017

Jenny Ward	2015–2016
Andrew Bundas ★	2014–2016
Jason Emming	2014–2016
Madison Harris	2014–2016
Yunxiao Jia	2014–2016
Tyler Lux	2014–2016
Alex McComb ★	2014–2016
Stephen Mee	2014–2016
TJ Sassorossi	2014–2016
Carolyn Wendeln †★	2013–2016
Max Morehead	2016
Edward Buie	2014–2015
DuRay Petersen	2014–2015
Naomi Williams	2013–2015
David Saunders ★	2012–2015
Josh Milem	2015
Brandon Russell	2013–2014
Dana Koeppe †★	2013–2014
Jacob Gruhn	2013–2014

Invited Presentations (since 2013):

SuperVirtual Conference	
Online	Nov 2023
Munich Joint Astronomy Colloquium	
Online	Feb 2023
Colloquium at Michigan State University	
East Lansing, MI	Oct 2022
Colloquium at Max Planck Institute for Radio Astronomy	
Online	Oct 2022
Colloquium at Center for Astrophysics Harvard & Smithsonian	
Online	Oct 2021
Astrolunch at Hebrew University of Jerusalem	
Online	Sep 2021
<i>Radio/Millimeter Astrophysical Frontiers in the Next Decade</i>	
Charlottesville, VA	Jun 2019
<i>Fifty One Erg</i> Conference	
Raleigh, NC	May 2019
<i>Conference for Undergraduate Women in Physics</i>	
Lansing, MI	Jan 2019

ThunderKAT Collaboration Workshop Arniston, South Africa	Dec 2018
Colloquium at New Mexico State University Las Cruces, NM	Nov 2018
<i>Scialog 2018: Time Domain Astrophysics</i> Tucson, AZ	Jun 2018
<i>Quarks to the Cosmos</i> Meeting of the American Physical Society Columbus, OH	Apr 2018
<i>Observational Signatures of Type Ia Supernova Progenitors III</i> Conference Leiden, Netherlands	Feb 2018
Colloquium at University of Wisconsin–Madison Madison, WI	Dec 2017
Colloquium at University of Wisconsin–Milwaukee Milwaukee, WI	Dec 2017
Colloquium at University of California–Los Angeles Los Angeles, CA	Nov 2017
Colloquium at Michigan State University East Lansing, MI	Nov 2017
Colloquium at Columbia University New York, NY	Oct 2017
Colloquium at University of Michigan Ann Arbor, MI	Oct 2017
Colloquium at University of Toledo Toledo, OH	Sep 2017
<i>JvG Fest 2017: Gas and Galaxy Evolution</i> Conference Stanley, ID	Aug 2017
<i>Cottrell Scholars Conference 2017</i> Tucson, AZ	Jul 2017
<i>NORDITA Extreme Gravity Stars</i> Conference Stockholm, Sweden	Jun 2017
<i>Conference on Shocks and Particle Acceleration in Novae</i> New York, NY	Jun 2016
Colloquium at West Virginia University Morgantown, WV	Apr 2016
Colloquium at Northwestern University Evanston, IL	Mar 2016
Colloquium at Purdue University West Lafayette, IN	Mar 2016
Colloquium at University of Texas Rio Grande Valley Brownsville, TX	Feb 2016
Colloquium at Oakland University	

Rochester, MI	Feb 2016
<i>U.S. Radio/Millimeter/Submillimeter Science Futures in the 2020's</i> Chicago, IL	Dec 2015
Colloquium at Ohio State University Columbus, OH	Nov 2015
<i>Scialog 2015: Time Domain Astrophysics</i> Oracle, AZ	Oct 2015
<i>Swinburne-Caltech Transient Workshop</i> Pasadena, CA	Oct 2015
<i>Radio Transients Workshop</i> Oxford, UK	Sep 2015
Colloquium at International Centre for Radio Astronomy Research/Curtin University Perth, Australia	Jul 2015
<i>Black Holes in Globular Cluster</i> Mini-Workshop Evanston, IL	May 2015
Colloquium at University of Minnesota Minneapolis, MN	Apr 2015
Colloquium at Indiana University Bloomington, IN	Mar 2015
<i>Black Holes in Dense Star Clusters</i> Conference Aspen, CO	Jan 2015
<i>The Physics of Cataclysmic and Compact Binaries</i> Workshop New York, NY	Oct 2014
Colloquium at University of Alabama Tuscaloosa, AL	Oct 2014
<i>Type Ia Supernovae: Progenitors, Explosions, and Cosmology</i> Conference Chicago, IL	Sep 2014
<i>"Explosions I Have Known": Stirling Colgate's Legacy in Science</i> Conference Los Alamos, NM	Aug 2014
<i>Fast and Furious: Understanding Exotic Astrophysical Transients</i> Workshop Aspen, CO	Jun 2014
Colloquium at University of Illinois Urbana-Champaign, IL	Apr 2014
Colloquium at University of Toronto Toronto, Canada	Feb 2014
Colloquium at Notre Dame Notre Dame, IN	Dec 2013
Colloquium at Western Ontario London, Canada	Dec 2013
Colloquium at University of Wisconsin Madison, WI	Nov 2013

<i>Observational Signatures of Type Ia Supernova Progenitors</i> Workshop Leiden, Netherlands	Sep 2013
<i>Radio Transients with SKA Pathfinders and Precursors</i> Conference Kruger, South Africa	Jul 2013
<i>40 Years of Variable Stars</i> Conference East Lansing, MI	May 2013
NRAO Postdoc Symposium Green Bank, WV	May 2013
<i>Fifty One Ergs</i> Conference Raleigh, NC	May 2013
High Energy Astrophysics Division Meeting of the American Astronomical Society (AAS) Monterey, CA	Apr 2013
Colloquium at University of Michigan Ann Arbor, MI	Mar 2013
Colloquium at Wayne State University Detroit, MI	Feb 2013
Colloquium at Oskar Klein Centre Stockholm, Sweden	Feb 2013