

JUSTIN H. ROBINSON – CURRICULUM VITAE

CONTACT INFORMATION

Department of Physics & Astronomy
Georgia State University
Atlanta, GA 30302

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CURRENT POSITION

Lecturer 2024-Present
Georgia State University (GSU)

EDUCATION

GSU 2022
Ph.D., Astronomy
Advisor: Dr. Misty Bentz

GSU 2020
M.S., Physics
Advisor: Dr. Misty Bentz

Saint Mary's College of California (SMC) 2017
B.S. in Physics with Astrophysics Concentration
Advisors: Dr. Ronald Olowin, Dr. Brian Hill

PREVIOUS EMPLOYMENT

Visiting Lecturer 2023-2024
GSU

Tenure Track Assistant Professor 2021-2023
Troy University (TU)

Graduate Research Assistant 2017-2022
GSU

Astronomy Graduate Lab Coordinator 2019-2021
GSU

Mathematics Tutorial Teacher 2016-2017
Taught pre-calculus and calculus tutorial classes at SMC

Laboratory Assistant 2015-2017
Assisted in the astronomy lab course at SMC

PROFESSIONAL AFFILIATIONS

Astronomy on Tap (AoT) 2024-Present
Georgia Space Grant Consortium (GSGC) 2018-Present
American Astronomical Society (AAS) Member 2017-Present
Troy Astronomical Society (TAS) 2021-2023
Arecibo Legacy Fast ALFA (ALFALFA) 2014-2017
Arecibo Pisces-Perseus Supercluster Survey (APPSS) 2014-2017

SKILLS

Proficient in IDL, Python, L^AT_EX, IRAF, DS9, MacOS, Windows, Linux, Microsoft Office Suite
iCollege instructor and proficiency certification
Canvas instructor and proficiency certification
Knowledgeable in MaximDL
CAMEL: geometric and dynamical modeling software of reverberation mapping data.
Galfit: galaxy surface brightness modeling software.
BusyFit: analytical modeling of emission line profiles.
Green Bank Telescope (GBT) GBTIDL: IDL suite for reduction and analysis of GBT spectral data.
Remote observing, GBT
Arecibo Radio Telescope IDL_LBW: IDL suite for reduction and analysis of Arecibo spectral data.
Remote observing, Arecibo Telescope

LEADERSHIP POSITIONS

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| GSU Affiliate Director, GSGC | 2024-Present |
| AoT Atlanta Program Manager | 2024-Present |
| Click here for AoT Atlanta's website | |
| Georgia Outreach Team for Space (GOT Space) Faculty Lead, GSGC | 2023-Present |
| Click here for GOT Space's website | |
| Three Taverns Astrophysics Lecture Series Director | 2023-2024 |
| GSU Research Experience for Undergraduates (REU) Program Mentor | 2024 |
| Interim GSU Affiliate Director, GSGC | 2023-2024 |
| Research Committee Chair, Faculty Senate, TU | 2023 |
| Faculty Senate, TU | 2022-2023 |
| TAS President, TU | 2022-2023 |
| TAS Vice President, TU | 2021-2022 |
| Astronomy Graduate Lab Coordinator, GSU | 2019-2021 |
| AstroPAL (Peer Advising Leader), GSU | 2019-2021 |
| GOT Space Graduate Lead, GSGC | 2018-2021 |
| Graduate Student Liaison, AstroPAL & Physics Graduate Student Association, GSU | 2018-2019 |
| ALFALFA Undergraduate Research Leader, SMC | 2017 |

COURSES DEVELOPED AND TAUGHT

PHYS-1111K “Introductory Physics I”
Undergraduate, algebra-based physics lab science course, GSU

PHYS-2211K “Principles of Physics I”
Undergraduate, calculus-based physics lab science course, GSU

ASTR-1000K “Introduction to the Universe”
Undergraduate science course, GSU

ASTR-1010K “Astronomy of the Solar System”
Undergraduate lab science course, GSU

ASTR-1020K “Stellar and Galactic Astronomy”
Undergraduate lab science course, GSU

ASTR-3301 “Extragalactic Astronomy”
Undergraduate upper-division astronomy & astrophysics course, TU

SCI-1110 “Exploring the Solar System”
Undergraduate lab science course, TU

SCI-L110 “Exploring the Solar System Lab”

Undergraduate science lab, TU

SCI-1110 ONLINE “Exploring the Solar System ”

Online undergraduate lab science course, TU

SCI-L110 ONLINE “Exploring the Solar System Lab”

Online undergraduate science lab, TU

SCI-2240 “Principles of Astronomy: Stars, Galaxies, and Cosmology”

Undergraduate lab science course, TU

SCI-L240 “Principles of Astronomy: Stars, Galaxies, and Cosmology Lab”

Undergraduate science lab, TU

SCI-2240 ONLINE “Principles of Astronomy: Stars, Galaxies, and Cosmology”

Online undergraduate lab science course, TU

SCI-L240 ONLINE “Principles of Astronomy: Stars, Galaxies, and Cosmology Lab”

Online undergraduate science lab, TU

SCI-L233 “Physical Science Laboratory”

Undergraduate science lab, TU

PREVIOUS TEACHING EXPERIENCE

GSU Substitute Lecturer - Graduate

2024

Taught 3 lectures and contributed curricula to ASTR-8400K “Extragalactic Astronomy” and ASTR-8200K “Galactic Structure” graduate courses

GSU Substitute Lecturer - Undergraduate

2019

Taught 7 undergraduate astronomy lectures

Astronomy Lab Instructor

2017-2020

Taught 1010 and 1020 labs for introductory astronomy courses at GSU

Mathematics Tutorial Teacher

2016-2017

Taught pre-calculus & calculus tutorial classes at SMC

Mathematics Tutor

2016-2017

Student tutor at SMC

SMC Substitute Lecturer

2016-2017

Taught 2 astronomy lectures as a substitute instructor

Teaching Assistant, Astronomy

2015-2017

Mathematics Private Tutor

2013-2015

UNDERGRADUATE STUDENTS ADVISED (ACADEMIC)

Nicole Eikmeier, BS in physics, astronomy & astrophysics minor, TU

2023

Elizabeth Alexander, BS in physics, astronomy & astrophysics minor, TU

2023

Veronica Lahue, BS in physics, astronomy & astrophysics minor, TU

2022-2023

Thomas Kay, BS in physics, astronomy & astrophysics minor, TU

2022-2023

Aster Hamaker, BS in physics, astronomy & astrophysics minor, TU

2022-2023

Mystic Wilkes, BS in physics, astronomy & astrophysics minor, TU

2022-2023

Austen Hensley, BS in physics, TU

2021

UNDERGRADUATE STUDENTS ADVISED (RESEARCH)

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| Abraham Seck, BS in physics, astronomy concentration (TEAM-UP Scholarship), GSU | 2025 |
| Meenakshi Raj, BS in physics (Honors Thesis), GSU | 2025 |
| Mahitha Ramachandran, BS in astronomy & astrophysics (REU Student), University of Pittsburgh | 2024 |
| Ishita Chintala, BS in physics (REU Student), GSU | 2024 |
| Naveen Ali, BS in aerospace engineering, Georgia Institute of Technology | 2023-2024 |
| Atul Gautam, BS in physics, GSU | 2023-2024 |
| Bradley Clemons, BS in physics (PHYS4900K student), GSU | 2023-2024 |
| Thomas Gregoire, BS in physics (PHYS4900K student), GSU | 2023 |
| Veronica Lahue, BS in physics, astronomy & astrophysics minor, TU | 2022-2024 |
| Thomas Kay, BS in physics, astronomy & astrophysics minor, TU | 2022-2024 |

AWARDS AND HONORS

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|---|------|
| Nominee, Ingalls Award for Excellence in Classroom Teaching, TU | 2023 |
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RESEARCH INTERESTS

HI 21 cm emission line diagnostics; active galactic nucleus host galaxies; extragalactic distance determinations; galaxy baryonic/dynamical/dark matter mass determinations; relationships between galaxies and supermassive black holes; supermassive black hole mass measurements via reverberation mapping.

PEER-REVIEWED PUBLICATIONS

“*Investigating the Narrow Line Region Dynamics in Nearby Active Galaxies*”, Beena Meena, D. Michael Crenshaw, Henrique R. Schmitt, Mitchell Revalski, Zo Chapman, Travis C. Fischer, Steven B. Kraemer, **Justin H. Robinson**, Julia Falcone, Garrett E. Polack 2023, ApJ, 943, 98

[Click here for the abstract](#)

“*Tully-Fisher Distances and Dynamical Mass Constraints for 24 Host Galaxies of Reverberation-Mapped AGN*”, **Justin H. Robinson**, Misty C. Bentz, Hélène M. Courtois, Megan C. Johnson, D. M. Crenshaw, Beena Meena, Garrett E. Polack, Michele L. Silverstein, Dading Chen 2021, ApJ, 912, 160

[Click here for the abstract](#)

“*HI Spectroscopy of Reverberation-Mapped Active Galactic Nuclei*”, **Justin H. Robinson**, Misty C. Bentz, Megan C. Johnson, Hélène M. Courtois, Benjamin Ou-Yang 2019, ApJ, 880, 68

[Click here for the abstract](#)

ACCEPTED PROPOSALS

“**HI Spectroscopy of Active Galaxies with Direct Black Hole Mass Measurements**”

GBT Project ID: GBT18B-258

Hours allocated: 208.25

GRANTS

“**Georgia State University - GSGC Fellowship**” (x2)

Amount Allocated: \$10,000

“**Georgia State University - GSGC Visiting Observer Program**” (x2)

Amount Allocated: \$4,000

“**The Georgia Outreach Team for Space**”

Amount Allocated: \$10,000

Total: \$38,000

OBSERVING EXPERIENCE

100m GBT: Green Bank Observatory, Green Bank WV
305m Arecibo Telescope: Arecibo Observatory, Arecibo PR
3.5m A.R.C. Telescope: Apache Point Observatory, Sunspot NM
0.5m A.R.C.S.A.T. Telescope: Apache Point Observatory, Sunspot NM
20m Green Bank Telescope: Green Bank Observatory, Green Bank WV
0.60m Miller Telescope: Hard Labor Creek Observatory, Rutledge GA
0.4m Meade Schmidt-Cassegrain Telescope: Geissberger Observatory, Moraga CA

CONFERENCE TALKS AND POSTERS

245th AAS Meeting, Poster Number 252.05 2025
“Dynamical Modeling of the Broad Line Region of NGC 4151”
Mahitha Ramachandran, **Justin Robinson**

242nd AAS Meeting, Poster Number 341.23 2023
“On the Tully-Fisher Relation for AGN Host Galaxies”
J. Robinson, M. Revalski, T. Kay, V. Lahue, M. Menon

240th AAS Meeting, Talk Number 335.04D 2022
“Distances & Black Hole Masses of Nearby Seyferts”
J. Robinson, M. Bentz

237th AAS Meeting, Talk Number 209.01 2021
“Dynamical Masses for the Host Galaxies of Reverberation-Mapped AGN”
J. Robinson, M. Bentz

236th AAS Meeting, Talk Number 225.03 2020
“Fundamental Properties of Active Galaxies: Distances and Masses of Nearby Seyferts,”
J. Robinson, M. Bentz
Recording available, [click here](#)

7th Perimeter Astronomy Conference 2019
“Connecting AGN Host Galaxies to the Cosmic Distance Ladder”

Georgia Regional Astronomers Meeting 2018
“HI Spectroscopy of Reverberation-Mapped Active Galactic Nuclei”
Recording available, [click here](#)

6th Perimeter Astronomy Conference 2018
“HI Spectroscopy of Reverberation-Mapped Active Galactic Nuclei”
Recording available, [click here](#)

5th Perimeter Astronomy Conference 2017
“The Radio View of Galaxies in the Nearby Universe”

INVITED TALKS AND COLLOQUIA

Space Telescope Science Institute Galaxies and AGNs Journal Club Guest Presenter 2024
“On the Tully-Fisher Relation for AGN Host Galaxies”

Bradley Observatory at Agnes Scott College Open House 2023
“Building the Real Images of Supermassive Black Holes”

Charlie Elliott Astronomy Club 2022
“Probing Nearby Active Galaxies: Distances, Masses, Dark Matter, and Black Holes”

University of Alabama at Birmingham Physics Colloquium 2022
“Probing Nearby Active Galaxies: Distances, Masses, Dark Matter, and Black Holes”

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| Von Braun Astronomical Society | 2022 |
| “Probing Nearby Active Galaxies: Distances, Masses, Dark Matter, and Black Holes” | |
| Space Telescope Science Institute Galaxies and AGNs Journal Club Guest Presenter | 2021 |
| “Distances and Masses for 24 Host Galaxies of Reverberation-Mapped AGN” | |
| United States Naval Observatory Journal Club Guest Presenter | 2021 |
| “Tully-Fisher Distances and Dynamical Mass Constraints for 24 Host Galaxies of Reverberation-Mapped AGN” | |
| Bradley Observatory at Agnes Scott College Open House | 2021 |
| “Probing Nearby Active Galaxies: Distance, Masses, Dark Matter, and Black Holes” | |
| Recording available, click here | |

WORKSHOPS

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| Learning Science Through the Lens of Astronomy | 2021 |
| Hosted professional development workshop for Georgia STEM teachers; interactive K-12 STEM presentations of astronomy-themed topics | |
| Recording available, click here | |
| Single Dish Training Workshop | 2018 |
| Observational training and data analysis tools for the 100 meter GBT | |
| Undergraduate ALFALFA Workshop | 2016 |
| Study of galaxy detections from radio spectrum, acquisition of detection characteristics and behavior from radio emission at the Green Bank Observatory | |

ASTRONOMY SERVICE

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| Subject-matter expert reviewer in a NASA peer review | 2023, 2025 |
| Referee for <i>The Astrophysical Journal (ApJ)</i> | 2022-Present |

UNIVERSITY SERVICE

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| GSGC Affiliate Director, GSU | 2024-Present |
| Serve as director of communication, resources, programs, collaborations, proposals, and grant management between GSU and the GSGC | |
| Physics & Astronomy Undergraduate Advisor, TU | 2021-2023 |
| Faculty Senate, TU | 2022-2023 |

COMMITTEES

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| Chair, Research Committee | 2023 |
| Executive Committee | 2023 |
| Athletic Advisory Committee | 2022-2023 |
| Academic Affairs Committee | 2022-2023 |

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| IMPACT Faculty Representative, TU | 2022 |
| Representative of Chemistry & Physics Department for new student orientation session | |

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| Commencement Faculty Representative, TU | 2022 |
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| Trojan Day Faculty Representative, TU | 2021, 2022 |
| Representative of Chemistry & Physics Department for prospective students | |

COLLEGE SERVICE

Astronomy & Astrophysics Colloquium Director, TU 2022-2023
Curate and manage invited speakers for the astronomy & astrophysics colloquium series for the College of Arts and Sciences at TU

HOSTED SPEAKERS

Dr. Mitchell Revalski
“How Galaxies are Shaped by Supermassive Black Hole Winds” 2022

Dr. Michelle Wooten
“Light Pollution at Home in the South: How it Affects Us and What We Can Do” 2022

Dr. Eliot Vrijmoet
“One Big Picture of M Dwarf Binary Star Orbits” 2023

DEPARTMENT SERVICE

TEAM-UP Together Scholarship Program Research Mentor, GSU 2025
Mentor of research project for 1 undergraduate physics major recipient of the TEAM-UP scholarship

PHYS 4970K Research Mentor, GSU 2025
Mentor of honors thesis research project for 1 undergraduate physics major

ASTR 1000K Committee, GSU 2024-Present
Production and adherence to consistent pedagogy between instructors and advocacy for cost-effective textbook options for ASTR 1000K

HyperPhysics Committee, GSU 2023-Present
Management and updating of [HyperPhysics](#)

Undergraduate Research Committee, GSU 2023-Present
Selection of accepted REU applicants, management of REU program

Departmental Evaluations Committee, GSU 2023-Present
Curate and update student learning outcomes and end-of-semester evaluations for ASTR1010K and ASTR1020K courses

PHYS 4900K Research Project Mentor, GSU 2023
Mentor of research projects for 2 undergraduate physics majors

Physics Faculty Search Committee, TU 2023
Oversee recruitment, interviewing, and hiring of physics faculty member

New Astronomy Course Development, TU 2022-2023
“Extragalactic Astronomy” 2022-2023
“Stellar Evolution” 2023
“Astronomy Capstone” 2022-2023

Student Recruitment to Physics Major, TU 2022-2023
Students recruited: 7

Astronomy & Astrophysics Minor Development, TU 2022-2023
Develop requirements and material included in new Astronomy & Astrophysics minor

Online Instruction Material Development, GSU 2020
Built online curriculum for 1010 and 1020 introductory astronomy labs

Workshop Development for Graduate Students Through AstroPAL, GSU
Developed material for 1st and 2nd year graduate students (qualifying exam preparation, coding, scientific writing, etc.)

2019-2021

PUBLIC OUTREACH

AoT Atlanta Program Manager

2024-Present

Curate and manage talks for the Atlanta chapter of AoT

[Click here for AoT Atlanta's website](#)

FEATURED SPEAKERS

Faculty/Research Scientists

Dr. Justin Robinson (GSU)

Dr. Viacheslav Sadykov (GSU)

Dr. Sebastien Lepine (GSU)

Dr. Russel White (GSU)

Dr. Jeremy Jones (GSU)

Dr. Merida Batiste (Emory)

Graduate Students

Mary Geer Dethero (GSU)

Dr. Katherine Shephard (GSU)

Zach Way (GSU)

Julia Falcone (GSU)

Emma Galligan (GSU)

Maura Shea (GSU)

Andrew Couperus (GSU)

Colin Kane (GSU)

Jacob Tutterow (GSU)

KhaDeem Coumarbatch (GSU)

Three Taverns Astrophysics Lecture Series Director

2023-2024

Curate and manage GSU graduate student and faculty talks for monthly series at Three Taverns Brewery and Three Taverns Imaginarium

GOT Space Faculty Lead

2023-Present

GOT Space Program faculty lead in association with the GSGC

[Click here for GOT Space's website](#)

EVENTS

GOT Space Presentations

Booker T. Washington High School

2024

Drew Charter School

2023

A. L. Burress Elementary

2023

Usher-Collier Elementary

2023

Hard Labor Creek Observatory Volunteer

2023-Present

Charlie Elliott Astronomy Club Invited Talk

2022

Von Braun Astronomical Society Invited Talk

2022

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| TAS President | 2022-2023 |
| Curation and preparation of club presentations and invited speakers; director of observing sessions | |
| STEMapalooza Conference | 2021 |
| Presented GOT Space presentations and demonstrations to Georgia STEM teachers; ran virtual and augmented reality demonstrations | |
| 10th Georgia NASA STEM Conference | 2020 |
| Presented professional development workshop to Georgia STEM teachers | |
| Scientific Consultant for “Race Through Space: Galaxy Edition” App | 2020 |
| Selected galaxies, provided physical information, and calculated distance scales for Science ATL and Atlanta Science Festival’s app Click here for the app homepage | |
| GSU Publicity & Outreach Committee Member | 2020-2022 |
| Reporting of outreach events and student groups in the GSU official newsletter. | |
| GOT Space Graduate Lead | 2018-2021 |
| GOT Space Program lead ambassador in association with the GSGC | |
| EVENTS | |
| GOT Space Virtual Presentations | |
| Frederick Douglass High School | 2021 |
| Trip Elementary School | 2021 |
| Northside Elementary School | 2021 |
| Wolf Creek Elementary School | 2020 |
| Stone Mountain Middle School | 2020 |
| Flat Shoals Elementary School | 2020 |
| Jean Childs Young Middle School | 2020 |
| Maynard Holbrook Jackson High School | 2020 |
| GOT Space Presentations | |
| Maynard Holbrook Jackson High School | 2020 |
| Maynard Holbrook Jackson High School | 2019 |
| Lanier High School | 2019 |
| Maynard Holbrook Jackson High School | 2019 |
| Alpharetta High School | 2018 |
| Cristo Rey Jesuit High School | 2018 |
| Virtual GOT Space Public Talk | 2020 |
| Hosted virtual talk and Q&A: “Building M87’s Supermassive Black Hole Image” Recording available, click here | |
| Atlanta Science Festival “Imagining the Future” Event | 2020 |
| Presented for 4 classes at Jean Childs Young Middle School | |

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| NASA National Space Grant 30th Anniversary Event on Capitol Hill | 2020 |
| 1 of 3 representatives of Georgia outreach and GSGC; ran virtual and augmented reality demonstrations; met with 2 Georgia representatives to discuss impact and future funding | |
| Trip Elementary School STEM Night | 2020 |
| Organized science demonstrations and telescope observations, answered questions for several hundred students | |
| Carver Early College Science & Engineering Fair | 2019 |
| Organized 3 GOT Space ambassadors and I's participation as science fair judges | |
| STEM Undergraduate Ambassador Training Co-Facilitator | 2019 |
| 1 of 2 graduate lead facilitators for training of 18 undergraduate GOT Space ambassadors | |
| Atlanta Race Through Space 5K | 2019 |
| Ran GSGC sponsor tent | |
| Trip Elementary School STEM Night | 2019 |
| Ran science demonstrations and answered questions for several hundred students | |
| Hard Labor Creek Observatory Volunteer | 2018-2022 |
| Operate telescopes & answer public questions during open houses | |
| SMC Physics Outreach Program Member | 2015-2017 |
| Research presentations at Saint Mary's High School, Stockton CA and Athenian High School, Danville CA | |
| SMC Physics & Engineering Program Recruitment | 2015-2017 |
| Represented the physics department on preview days for prospective students | |

REFERENCES

Professor Govind Menon, Ph.D.

Chair, Department of Chemistry and Physics, TU
gmenon@troy.edu

Professor Misty Bentz, Ph.D.

Department of Physics and Astronomy, GSU
bentz@gsu.edu

Lori Skillings

Program Manager, GSGC
lskillings@gatech.edu

Professor D. Michael Crenshaw, Ph.D.

Department of Physics and Astronomy, GSU
dcrenshaw@gsu.edu

Professor Hélène M. Courtois, Ph.D.

Department of Physics, University of Lyon
h.courtois@ipnl.in2p3.fr

Megan Johnson, Ph.D.

Chief, Radio Reference Frame Division, United States Naval Observatory
megan.c.johnson15.civ@mail.mil

Updated 1/22/2025