

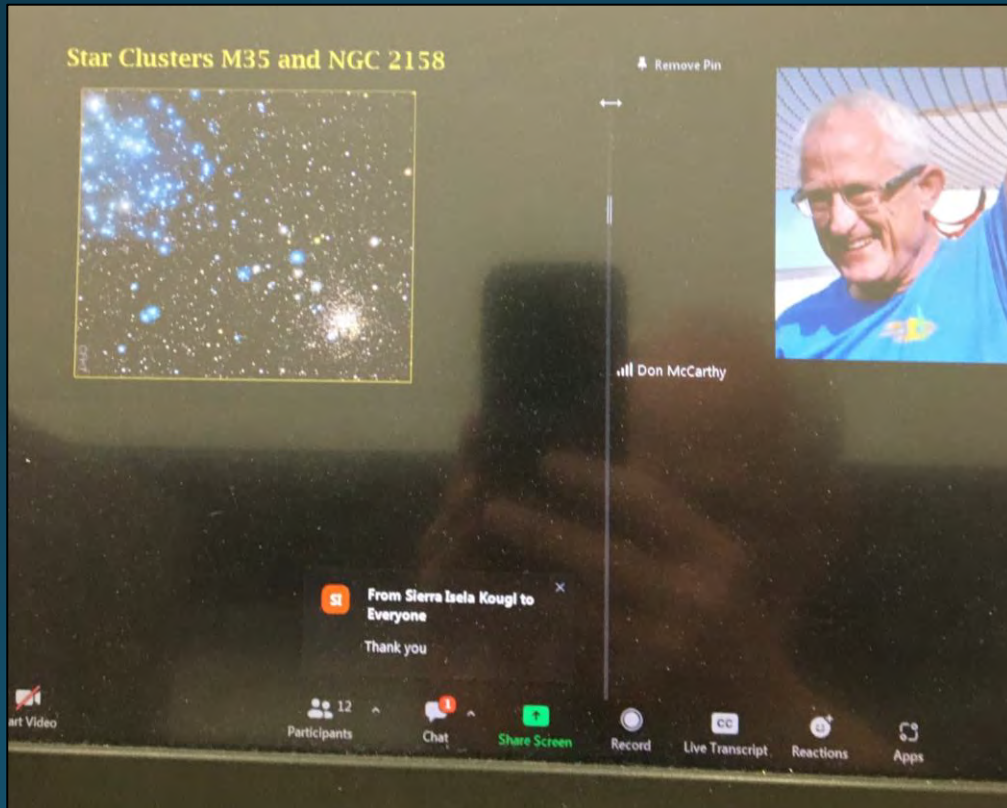
ASTRONOMY DEPARTMENT GRADUATION - 2022



Credit:
Evan Broby – Astronomy Camp

"Then, like some snowy owl and owlet waking for a night of dark marauding, they spread apart their tight-closed wings, open wide their big round eyes and peer about in all directions. The prey they seek is hidden somewhere in the skies - for these are my observatories." **Leslie C. Peltier**

Zoom Possibilities



"View Options"

select "Side-by-side Gallery"
"pin" one panel
adjust the widths

Welcome from our Director



Dr. Buell Jannuzi

Department of Astronomy

Department Leaders



Dr. Buell Jannuzi
Department Head



Dr. Dennis Zaritsky
Deputy Director



Dr. Xiaohui Fan
Associate Dept. Head

Our Undergraduate “Support Team”

our primary academic advisor
College of Science



Mr. David Smith
Senior Academic Advisor

Dr. Tom Fleming

Director of the Astronomy Minor Program



Dr. Kaitlin Kratter

Director of Graduate Studies



Our Undergraduate “Support Team”

Astronomy faculty advisors



Dr. Tom Fleming



Dr. Brenda Frye



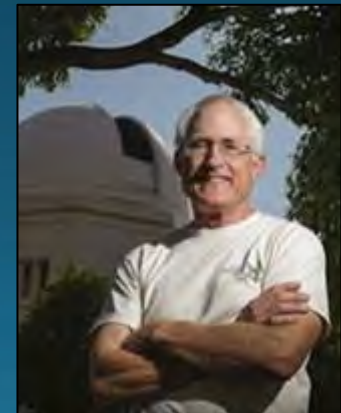
Dr. Kaitlin Kratter



Dr. Yancy Shirley
(Honors)



Dr. Ann Zabludoff

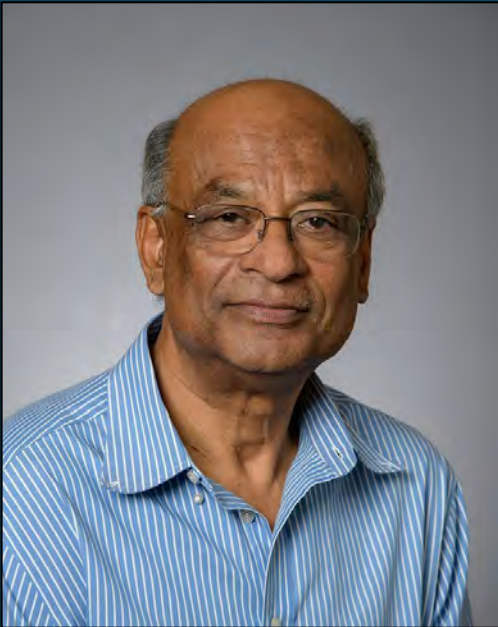


Dr. Don McCarthy

Our Colleagues in Physics & Math

93% of our graduates majored or minored in Physics

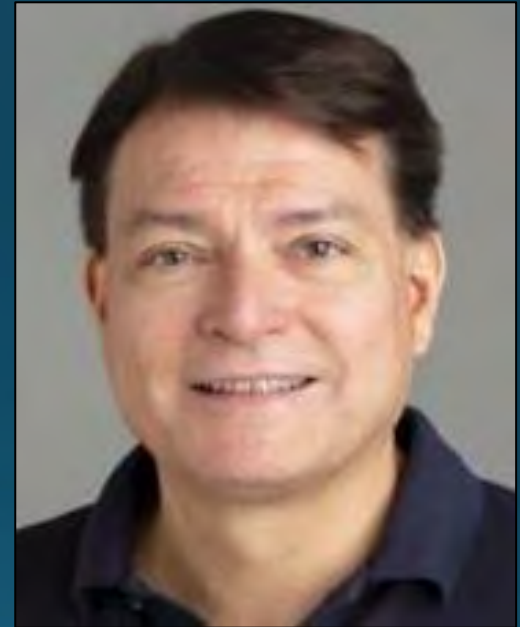
68% of our graduates majored or minored in Math



Dr. Sumit Mazumdar
Physics
Department Head



Dr. Charles Wolgemuth
Physics
Undergraduate Program
Director



Dr. Douglas Ulmer
Math
Department Head

Our “Support Team”

Academic Administrative staff



Michelle Cournoyer



Hector Rico

Our “Support Team”

Business Office & Development team
many dedicated staff and students



Mark Buglewicz



Cathi Duncan



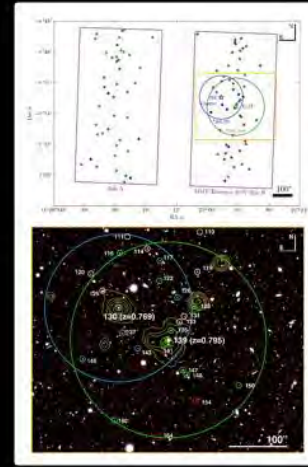
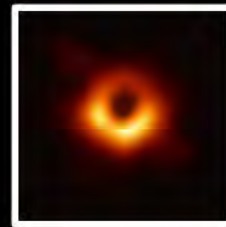
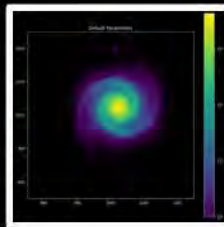
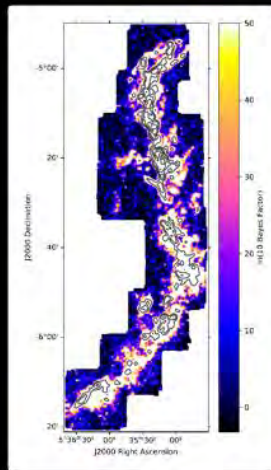
Christina Siqueiros

They also oversee our Scholarship Program
with the College’s Cecelia Perez and Cheryl Tomoeda
[\$30-60k per year to Astronomy students]

Our “Support Team” research foundations



OUR STUDENTS STUDY THE
ENTIRE UNIVERSE



Thank You!

Computer Support Group
Mountain Operations
Arizona Radio Observatories

Our “Support Team”

research mentors & student projects

- **Steward:**

- Arizona Cosmology Lab
- Arizona Radio Observatory
- Arizona Space Grant Consortium
- Center for Astronomy Education
- Exoearth Discovery and Exploration Network
- Imaging Technology Lab
- Richard F. Caris Mirror Lab

- **Other Departments:**

- Math
- Optical Sciences
- Physics
- Planetary Science (Lunar & Planetary Lab)

- **Tech companies in Tucson**

- **Planetary Science Institute**

- **NSF’s National Optical-Infrared Astronomy Research Laboratory**

- **Center for Astrophysics**

Arizona Astronomy Board Members

Also thanks to *"Friends of Steward"* !



Larry Allen



Dr. Francisco Robles



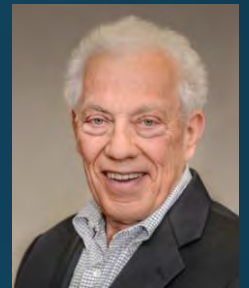
Ray Bell



Barry Boyce



Judy Brown



Jim Brown



Guy Jette



Sid Leach



George Mavko



Dan Neff



Cindy Rainey



Bill Rainey



David
Rossetter



Dr. Joseph
Schulman



Murray "Trip"
Wolbalch

Our Student Ambassadors

College of Science



Bianca Payan



Nick Foo

Our Volunteer “Peer Mentors” requires extensive training

- Alexia Kubas
- Nick Foo
- Ruby Fulford
- Avichal Kaul
- Jay Motka
- Carl Ingebretsen
- Nicholas Sanders

Our “Outstanding Seniors”



Bianca Payan
Outstanding Senior Award



Kayli Glidic
Excellence in Research Award

More “Outstanding Seniors” from Astronomy!



David Cantillo

Excellence in Research Award
Geoscience & College



Ruby Fulford

Excellence in Research Award
Planetary Science



Justin Hink

Excellence in Research Award
Physics

Introducing our Astro Majors very hardworking and ambitious

**Our 28 graduates have also majored/minored in
these subjects:**

astrobiology, biology, mathematics, data science, physics,
classics, applied physics, planetary science, statistics, Spanish

Future Plans

graduate and medical schools

UA labs: Steward and LPL

industry jobs

observing assistants

gap & bridge years

Our Graduates Over the Years

A trip down memory lane

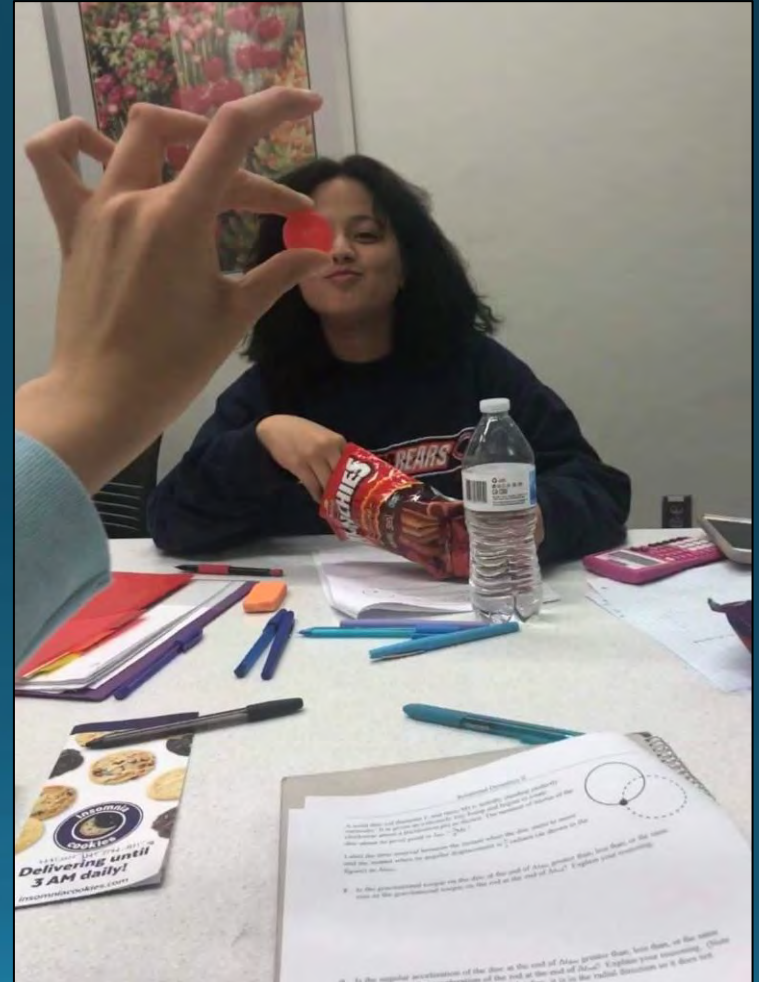
We persevered through the pandemic, ...
Wildcats *"Bear Down"*



OK, we got a bit silly!



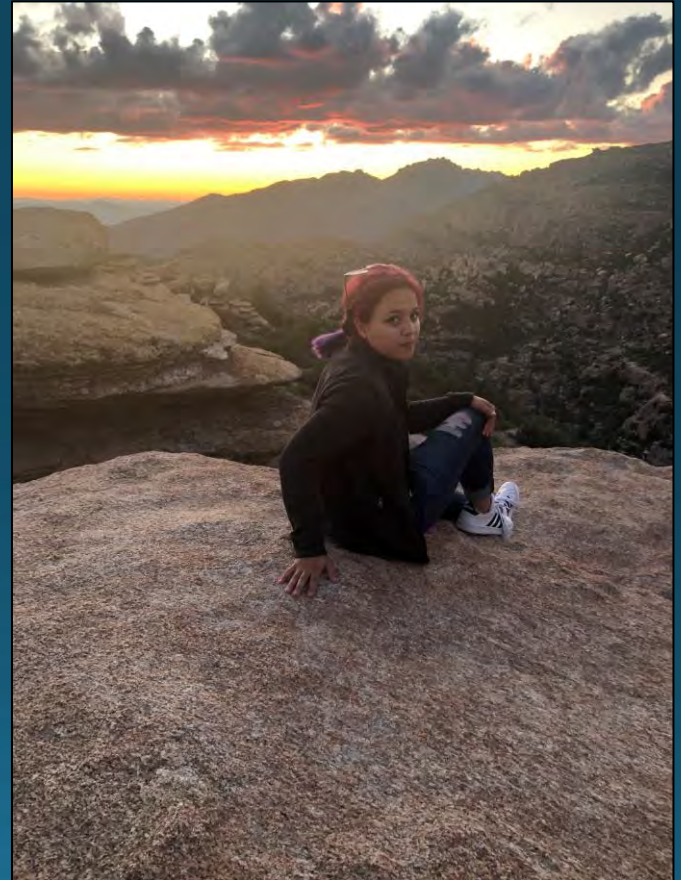
... and sillier!



both in/out of classrooms and labs



and still found time to relax and
ponder ...



and explore Nature ...



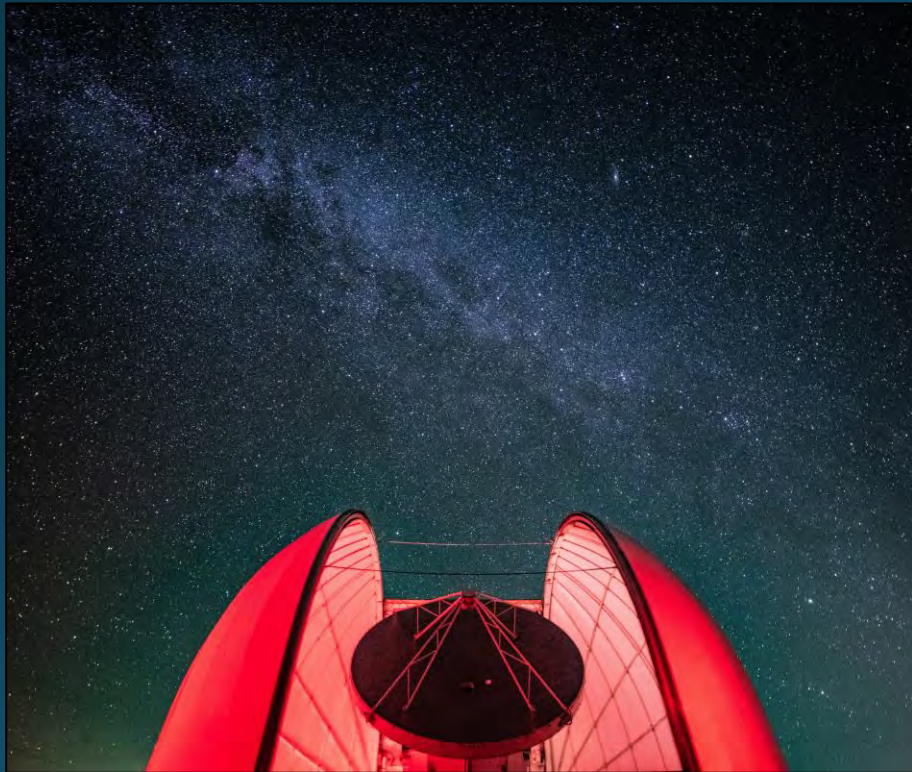
with friends and pets ...



and travel.



Radio Astronomy: Inspiring



“Dish Walks” always uplifting!



“Dish Walks” and challenging!



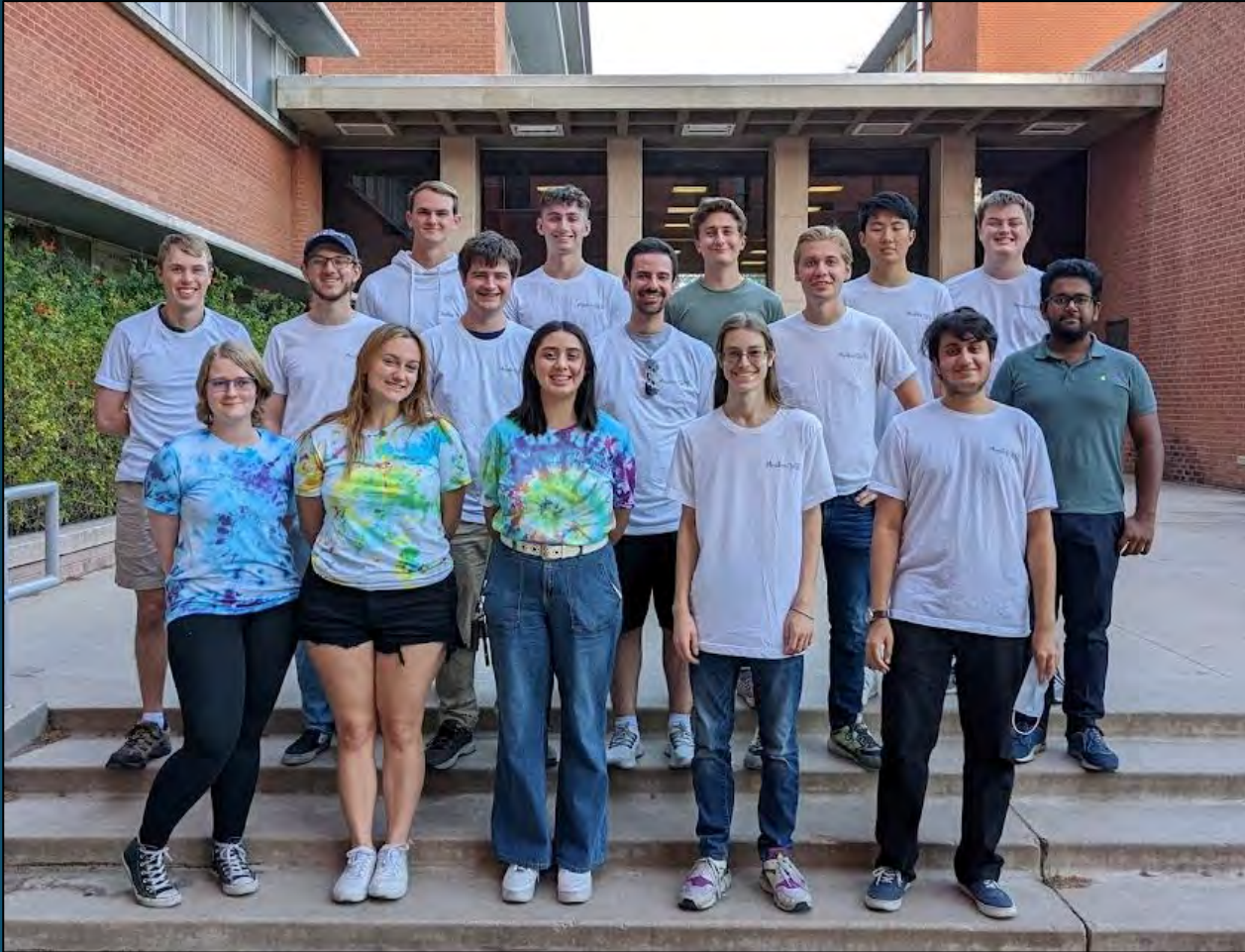
Astronomy Camp

established some early roots



12 Campers currently on campus
60 Astronomy degrees since 1988

Student Clubs were inspirational and fun!



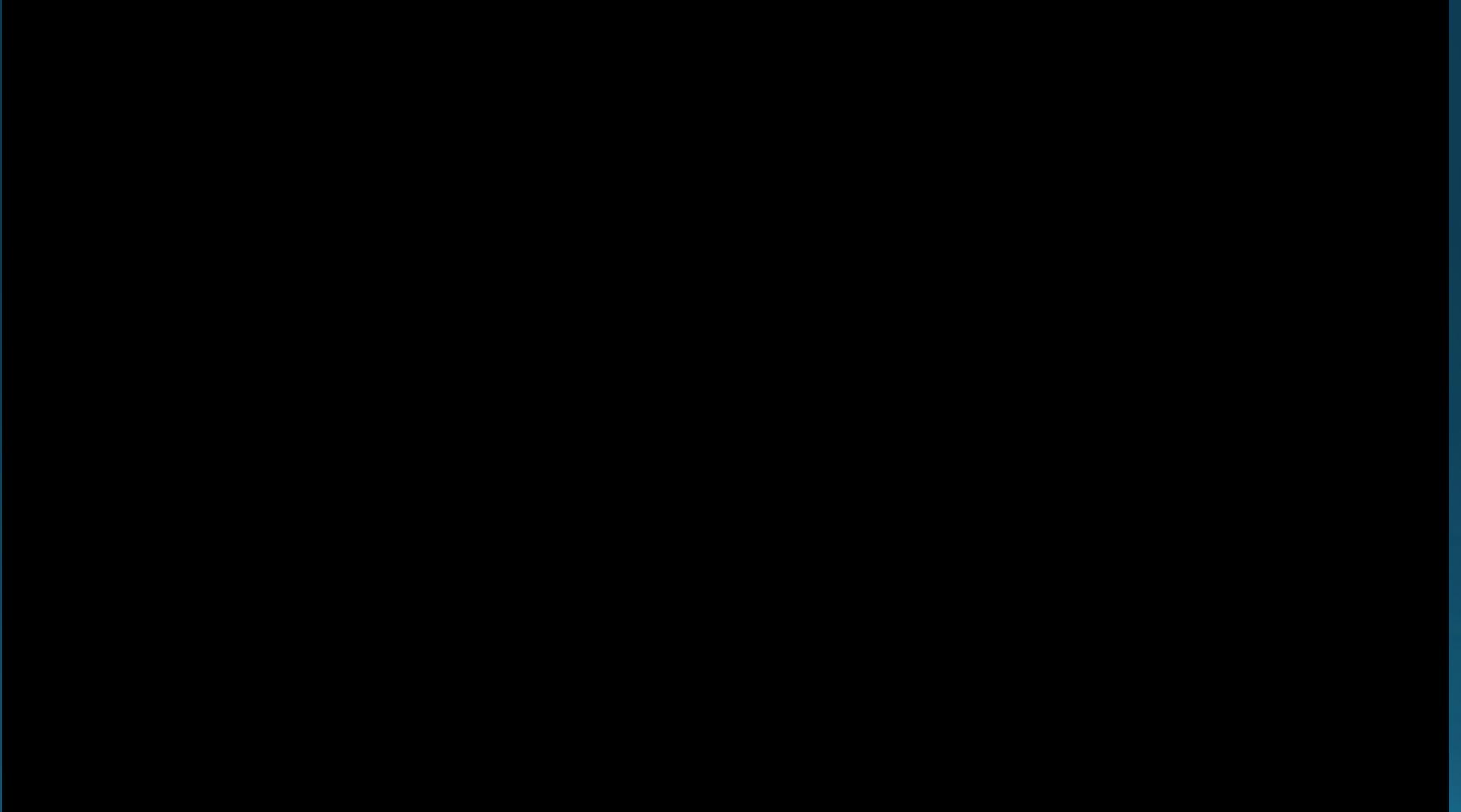
Physics Club

Our Astronomy Club



Astronomy Club Honors its Seniors

created by Aidan Nakhleh



A Poem for our Seniors

Binh Nguyen
astronomer, linguist, poet, photographer, ...



Spectroscopy

Binh Nguyen

When light must journey through a world so vast,
Each time absorbed, it leaves with a dark line.
It marches on with tokens of its past.

Through years of struggle, you are here at last!
I love how proudly all your faces shine.
That light has journeyed through a world so vast.

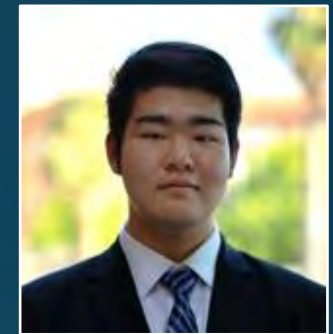
Despite all odds, I hope you've had a blast;
Hope you've made memories warming and benign;
Hope you'll march on with tokens of this past.

School has been hard, but look what you've amassed!
You've learned that you can drop the minus sign,
That seven equals nine in worlds so vast.

The future can seem cold and overcast,
But you will dazzle by your own design.
You will march on with tokens of this past.

Hug all your friends, your teachers firm and fast!
This is our farewell, but we'll all be fine.
When light must journey through a world so vast,
It marches on with tokens of its past.

Introducing Our Undergraduate “Majors”



Introducing Our Undergraduate “Majors”



Jonah Baade

- **Academics:**
 - Major: Astronomy
 - Minors: Physics, Math, CS
 - Advisor: Dr. Fleming
 - Research:
 - Dr. Kong, Dr. Shirley, Dr. Biegging: Constraining the H_2 volume density of Cygnus X
 - Dr. Douglas: Applying machine learning methods to exoplanet detection
- **Favorite activities:**
 - Creative writing (largely about space)
 - PC games
 - Working with Python
 - Discovering that I made a small typo in my script and wasted a lot of time
- **Future goals & plans:**
 - Continue current projects
 - Gap year; looking for jobs / other research positions



Keith Baka

Academics:

- Astronomy Major, Physics & Math Minors
- Honors College
- Two-time Galileo Scholar
- Research:
 - Disintegrating Exoplanets with Dr. Everett Schlawin,
 - and Binary Stars with Dr. Kaitlin Kratter

Favorite Activities:

- Cooking
- Stargazing
- Videogames
- Travelling
- Basketball

Future Goals & Plans:

- Attending University of Amsterdam for a Master's in Astrophysics!



Harrison Bradley

- **Academics:**

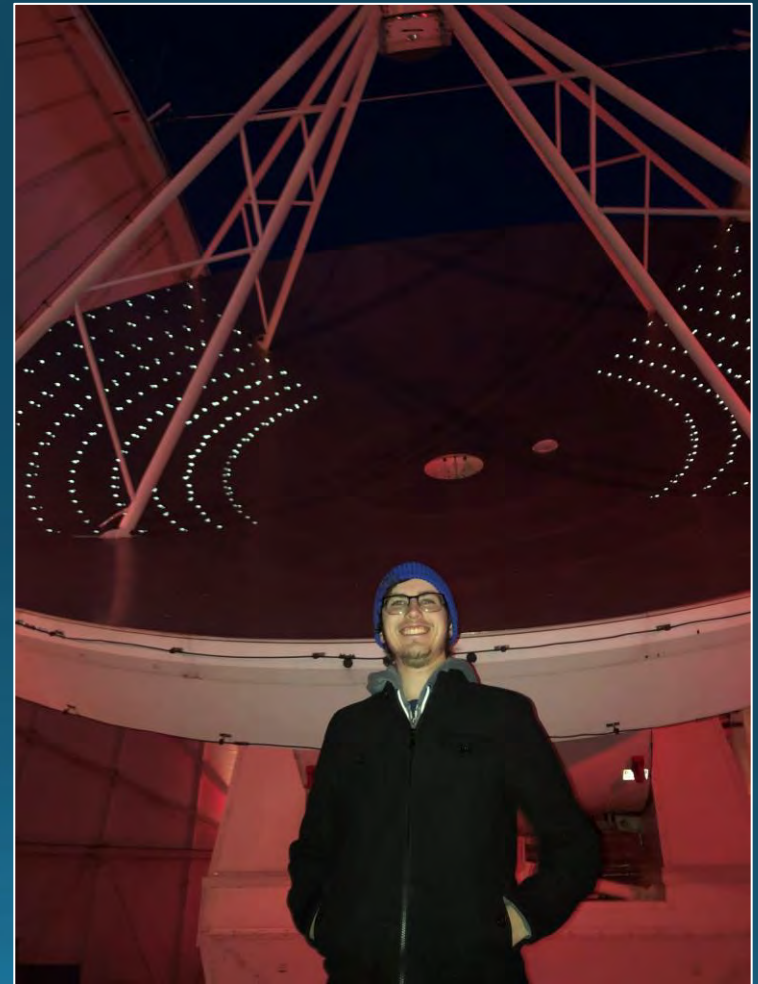
- Astronomy, Physics
- Minor: Planetary Science
 - NASA Space Grant Intern
 - REU at UT Dallas Physics
- Awards:
 - Dean's List
 - Galileo Circle Scholar
- ASTR Advisor: Dr. Fleming
- Research: Dr. Shirley
 - Dense Prestellar Cores in the Taurus Molecular Cloud

- **Favorite activities:**

- Gaming
- Tea Enjoyment
- Hiking
- Reading
- Travelling (by train)
- Hammock Time

- **Future goals & plans:**

- Gap Year Research
 - in Instrumentation



David Cantillo

Honorary Degree

- **Academics:**
 - Geology, Honors College
 - Minors in Planetary Science and Mathematics
 - Awards
 - College of Science Excellence in Undergraduate Research Award (GEOS and Overall Winner)
 - Honors College Outstanding Senior Award
 - Research: Asteroids with Dr. Vishnu Reddy
 - Constraining the regolith of asteroid Psyche
 - Spectral characterization of near-Earth objects and satellites with IRTF observations and telescopes at Biosphere II
- **Favorite activities:**
 - Leading the Astronomy Club (of course)!
 - Singing and playing guitar with my band Daytrails
 - Looking at rocks, hiking to see rocks, rocks, etc.
- **Future goals & plans:**
 - Ph.D. in Planetary Sciences at the University of Arizona Lunar and Planetary Laboratory
 - Advisor: Dr. Vishnu Reddy



Elizabeth Champagne

Will Clodfelder

- Academics:
 - Astronomy
 - Minors: Physics and Math
- Favorite activities:
 - Using my telescope
 - Gaming
 - Watching educational videos
- Future goals & plans:
 - Continue to work at the Mt. Lemmon SkyCenter
 - Wedding in September
 - Work in Astronomy outreach and education
 - Obtain a PhD in Astronomy and become a professor.



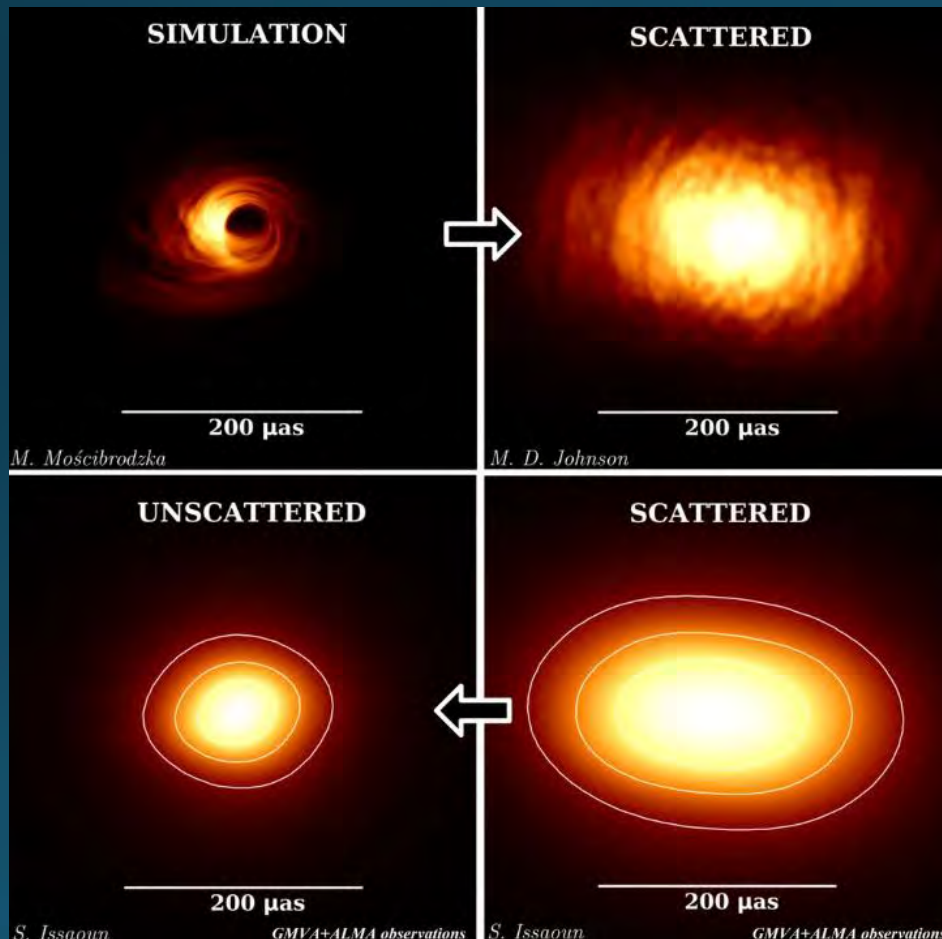
Jiyun “Jaden” Di

Majors	Astronomy
	Mathematics
Minor	Physics
Awards	Math Department 4.0 Major GPA Award
	McLean First-Generation Scholarship
Research	The spectroscopic survey of galaxy clusters at $z \sim 0.8$ using MMT/Binospec
Supervisor	Dr. Eiichi Egami
Advisor	Dr. Thomas Fleming
Destination	Stony Brook University (astro master)
Hometown	Lanzhou, Gansu Province, China
Gaming!	Genshin, Arknights



Sean Dougall

Attending press conference about image of OUR black hole



Patrick Flint

- **Academics:**
 - Astronomy Major
 - Physics minor
 - Research:
 - Using machine learning (CNN) to identify strong gravitational lenses
- **Favorite activities:**
 - Throwing/yoyoing
 - Hiking
 - Swimming/ anything to do with the ocean
 - Teaching/tutoring physics
 - Video Games
- **Future goals & plans:**
 - Taking a gap year and probably teaching in the mean time
 - Pursuing a PhD in theoretical physics maybe?



Nicholas Foo

- **Academics:**

- Astronomy, Physics
- Minor: Mathematics
- Awards:
 - Galileo Circle Scholar
 - *NASA Space Grant*
- ASTR Advisor: Prof. Brenda Frye
- Research: Prof. Brenda Frye
 - Gravitational Lensing to Study Early Universe

- **Favorite activities:**

- Basketball
- Hiking
- Watching Movies
- Cooking

- **Future goals & plans:**

- Gap Year: NASA CRESST II internship and continue to work with Prof. Brenda Frye



**Thank You to Prof. Brenda Frye & the Astronomy Department, my peers,
And of course Mom & Dad**



Matthew Forbes

Ruby Fulford

- **Academics:**

- **Astronomy Major**
- **Honors College**
- **Minors: Astrobiology, Biology, Physics**
- **ASTR Advisor: Dr. Brenda Frye**
- **Awards:**
 - *Excellence in Undergraduate Research Senior Award*, Planetary Sciences Department
 - *Chambliss Astronomy Achievement Student Award*, American Astronomical Society

- **Research:**

- **Dr. Lauretta: Imaging system development for OSIRIS-REx**
- **Dr. Svoboda (NRAO): Molecular cloud physics, radio astronomy**
- **Dr. Schwarz: NASA Space Grant, Protoplanetary disk chemistry**

- **Favorite activities:**

- **KAMP student radio**
- **Electric guitar**
- **Drawing, dancing, cooking**

- **Future goals & plans:**

- **Post Baccalaureate position with OSIRIS-REx**
- **Plans to enroll in graduate school in the next two years**



Kayli Glidic



Academics:

- Astronomy (Honors) & Physics Major
- Minor in Planetary Science

Awards:

"Excellence in Undergraduate Research" Senior Award (ASTR)

Research:

- Advisor: Dr. Everett Schlawin
- Characterizing the atmosphere of hot Jupiter CoRoT-1 b with secondary eclipse emission spectra
- Optimizing the James Webb Space Telescope photometric pipeline for exoplanet science using simulated data for the Near Infrared Camera

Favorite Activities:

- Cross-country Roadtrips with my dog Bear
- Playing my Nintendo Switch
- Impulse spending money on concerts
- Satisfying my coffee addiction (specifically Dunkin Donuts)
- Setting alarms I know I won't wake up to

Future goals & plans:

- Continue my research with JWST this summer and eventually attend graduate school for astronomy/planetary science (we'll see)

Aaron Goldtooth

- **Academics**

- Astronomy, Mathematics
- Minor: Physics
- Awards:
 - “Outstanding Undergraduate Award” (Native American Student Affairs)
- ASTR Advisor: Dr. Kratter
- Research: Dr. Zabludoff
 - Tidal Disruption Events, IMBHs

- **Favorite activities**

- Everything music, esp. playing my piano
- Getting enthralled by good stories
- Learning new skills
- Having good times with friends
- Giving back to my community
- Staying active, hiking, exploring the SW

- **Future goals & plans**

- TBD
 - Continue working towards a PhD
 - Continue helping other Indigenous students reach their Higher Education Goals



Justin Hink

- **Academics:**

- Astronomy, Physics
- Minor: Mathematics
- Awards:
 - "Outstanding Senior" Senior Award (PHYS)
 - "Excellence in Undergraduate Research" Senior Award (PHYS)
 - Galileo Circle Scholar
- ASTR Advisor: Dr. Smith
- Research: Dr. Rutherford
 - 350 GeV Incident Electron Shower
- Research: Dr. Melnitchouk
 - Impact Studies of EIC's Parity Violating Deep Inelastic Scattering Data

- **Favorite activities:**

- Video Games
- Studying?
- Ping Pong with the boiiiiss
- Hiking with friends
- Swimming

- **Future goals & plans:**

- PhD in the Physics and Biology in Medicine program at UCLA



Katelyn Jahnke

- **Academics:**
 - Astronomy
 - Minors: Physics, Mathematics
 - Research: Dr. Chris Impey, Dr. Matthew Wenger
 - Effects of peer feedback for UArizona's Astrobiology MOOC
- **Favorite activities:**
 - Hiking, Running
 - Reading
 - Cooking
 - Playing Piano and Clarinet
- **Future goals & plans:**
 - Gap year after graduating
 - Wedding in September
 - Aspiring to run an ultramarathon next year
 - Interested in working in Astronomy data analysis
 - Planning to pursue a doctorate in Astronomy or related field



Sai Krishanth Pulikesi Mannan



Majors: Astronomy and Physics

Minor: Mathematics

Stuff I like to do:

- Hike
- Take photos
- Cook
- Coffee

Future Plan:

Currently, do research for the next year. Eventually, graduate school.



People I have worked with:

1. Alyson Ford
2. Chad Bender
3. Tim Eifler
4. Vasileios Paschalidis



Alexia Kubas

- **Academics:**

- Honors College
- Major: Astronomy
- Minors: Physics, Mathematics, Planetary Sciences
- Advisor: Dr. Christopher Hamilton, LPL
- Awards: NASA Space Grant, Galileo Circle Scholarship
- Research:
 - *Giordano Bruno: Secondary impact cratering processes on the Moon*— Dr. Christopher Hamilton (LPL), Dr. Michael Zanetti (NASA MSFC)
 - NASA Student Airborne Research Program— Dr. Don Blake (UC Irvine)
 - Field/Lab Assistant at Fagradalsfjall Eruption, Iceland— Dr. Christopher Hamilton (LPL), Dr. Solange Duhamel (LPL/MCB)

- **Favorite activities:**

- Amplified A Cappella— member since Fall 2019,
- co-president since Spring 2020

- **Future plans:**

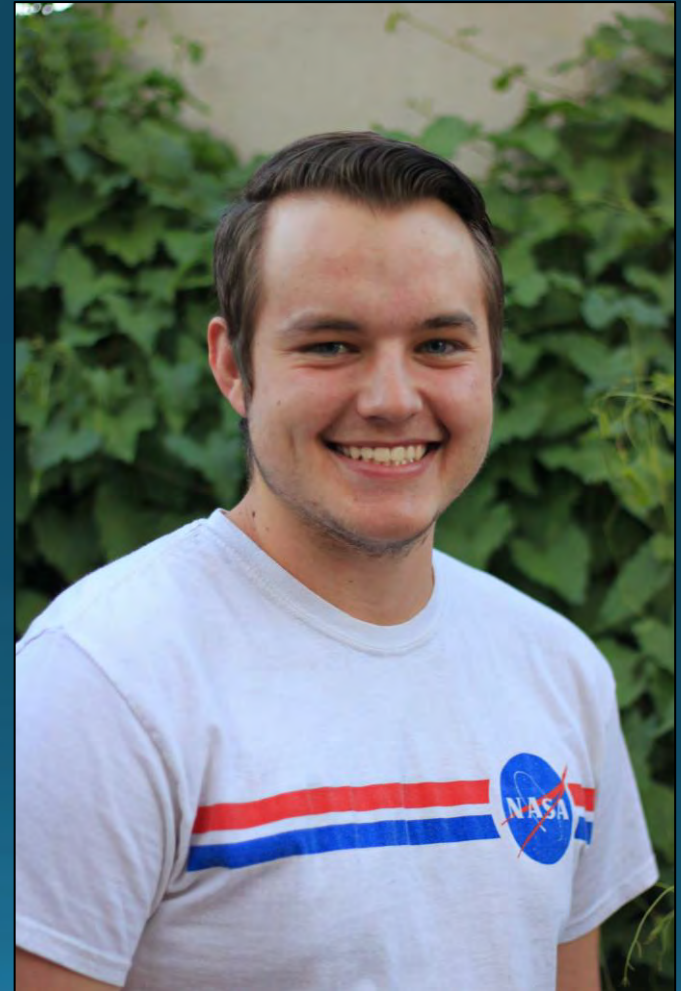
- Pursuing a PhD in Astronomy & Space Sciences at Cornell University beginning Fall 2022



David Lomeli

Jacob Magnusson

- **Academics:**
 - Astronomy, Statistics and Data Science
 - Minor: Spanish
 - Awards:
 - ASA DataFest 2022 Best Visualization Award
 - Research: Dr. Eiichi Egami
 - NIRCcam image simulation using PhoSim (Arizona Space Grant)
- **Favorite activities:**
 - Playing games with friend
 - Hiking
 - Tormenting my cat
- **Future goals & plans:**
 - Employment as a Junior Data Scientist in Atlanta area



Maya Mancini

Maya Mancini

Academics-

- **Astronomy, Physics**
- **Minor: Mathematics**
 - Internship with UA's OEAO Algebra Academy teaching at Tucson High.
- **Awards:**
 - College of Science Honor Cord Recipient
 - Galileo Circle Scholarship
- **ASTR Advisor: Dr. McCarthy**
- **Research: Dr. Erich Varnes and Dr. John Rutherford**
 - Long Lived Particles
 - ATLAS's Liquid Argon Forward Calorimeter

Activities/Hobbies:

- Reading Horror/Fantasy Novels
- Painting
- True Crime Documentaries

Future Goals and Plans:

- **PhD in Physics at Brandeis University**
 - Experimental High Energy Physics



Arsh Nadkarni

- **Academics**

- Majors: Astronomy, Applied Physics
- Minor: Mathematics
- Awards:
 - Honors Conference/Travel Award (2022)
 - 2nd Place - National Undergraduate Research Week Poster Contest, UArizona (2019)
- ASTR Advisor: Dr. Ann Zabludoff

- **Research: Dr. Thomas Beatty**

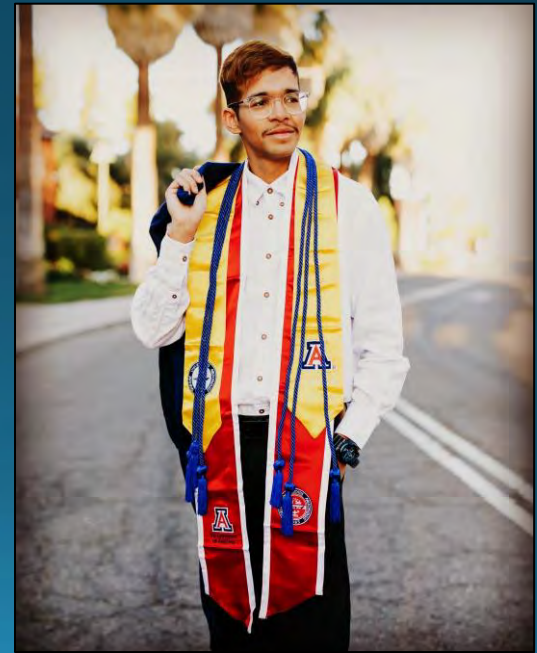
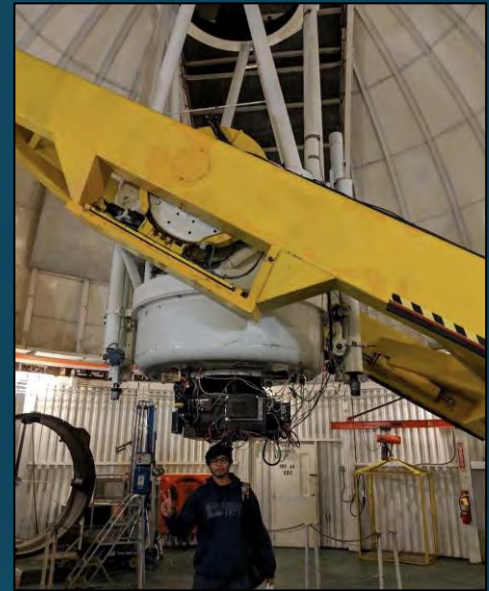
- Detection and characterization of exoplanets and EBs using TESS and ground-based extreme precision RV follow-up
- Simulating JWST/NIRCam GRISM Time-Series Observations of exoplanets and EBs for a data challenge and in-orbit commissioning (happening as of now!)

- **Favorite activities:**

- Sleeping long hours
- Astrophotography
- Brewing/Tasting Coffee
- 3D Printing

- **Future goals & plans:**

- Catch up on some sleep first!
- Queue Observer/Observing Assistant at an astronomical observatory
- Graduate school in ~2 years



Makayla Parkinson

- **Academics**
 - Major: Astronomy
 - Minors: Math, Physics
 - Astronomy Advisor: Yancy Shirley
 - Awards: Evelyn O Bychinsky Promising Astronomer
- **Research**
 - Adaptive optics and work on GMT testbed, Dr. Close
 - Engineering mirror movement for better object detection, Dr. McCarthy
- **Favorite Activities**
 - Reading, hiking
- **Future Goals and Plans**
 - Get an internship in space policy or related field



Bianca Payan



Nick Sanders

- **Academics**

- Physics, Astronomy
- Minor: Math
- Galileo Scholar
- PHYS Research: Dr. Rozo
 - Galaxy Colors in Cosmological Simulations
- ASTR Research: Dr. Zaritsky
 - Isolated Ultra-Diffuse Galaxies

- **Hobbies**

- Baking
- Board Games
- Reading Sci-Fi

- **Future**

- Summer Internship at SLAC
- Gap Year, Grad School for Physics



Akash Satpathy

Astronomy + Data Science (Honors)

- *Awards:* Bychinsky + Slipper + Regents Cup x 2 + Harvill + ...
- *Advisor:* Dr. Amy Mainzer
- *Research:* Asteroid Thermal Modeling

I enjoy photography, cooking, lifting, and on-campus activism

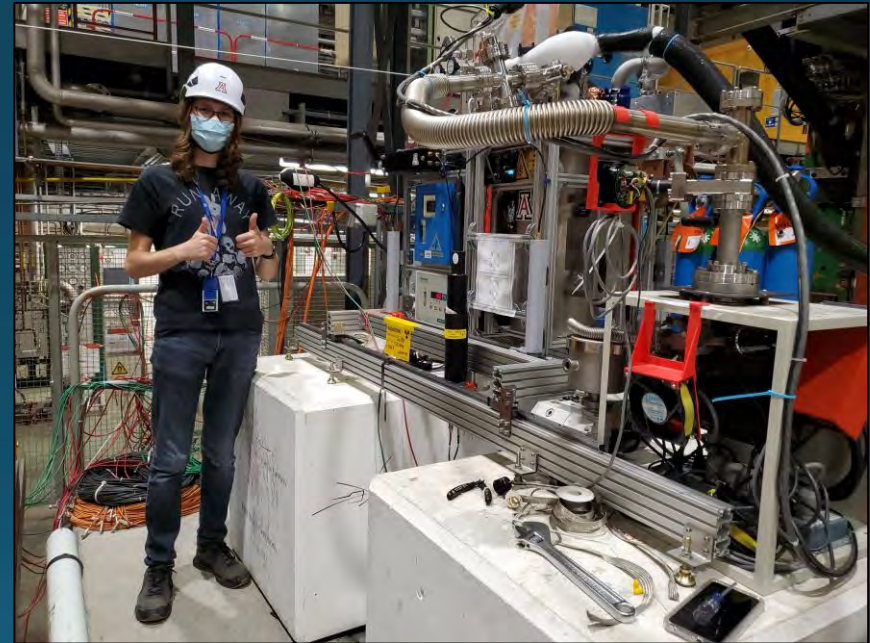
Next semester I will be a Graduate Student at the Lunar and Planetary Laboratory



Roni Sims

Graham Woolley

- **Academics**
 - Astronomy, Physics
- **Physics Research: Dr. Rutherford**
 - ATLAS, Liquid Argon Calorimeter
- **Astronomy Research: Dr. Smith**
- **Summer Opportunity:**
 - Participated in ATLAS related experiment at CERN
- **Favorite Activities**
 - Reading Fantasy
 - Hiking and Walking
 - Playing Nintendo Switch games
 - Working on data analysis
- **Future Plans**
 - Applying to Grad School for Fall 2023
 - Specialize in experimental particle physics



**Fcal Pulse Experiment at the
H2 beamline**

Qi'an Yu 余启安

• Academics

- Astronomy & Mathematics
- Advisor: Dr. Eiichi Egami
- Awards:
 - Langadas Scholarship Endowment X 2
 - Glenn C. Purviance Scholarships in Physics
 - The Weaver Award for Undergraduate Research
 - Kenneth S. Krane Physics Scholarship

• Research

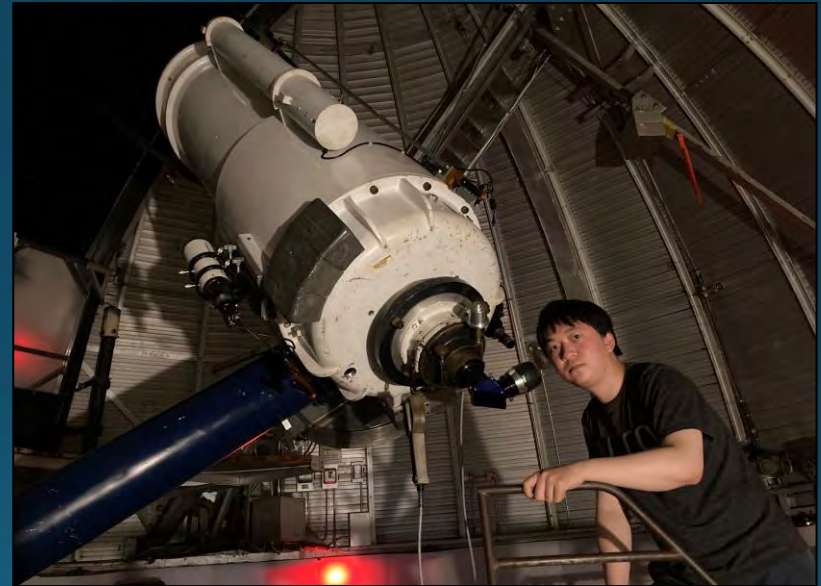
- MMT/Hectospec Survey of Shear-Selected Clusters
- PhoSim-NIRCam

• Favorite activities

- Eating & Sleeping
- Meet with friends

• Future goals & plans

- A gap year to get more research experience at the University of Science and Technology of China
- Spend more time with my families



Introducing Our Undergraduate “Minors” “Astronomy” or “Astronomical Studies”



**Director of the Minors Programs
Dr. Tom Fleming**

Students' Primary Academic Majors

Physics; Systems Engineering; Aero Engineering; Biomedical Engineering; Info Science; Law; Optical Sci; Computer Sci; Microbiology; History; Care/Health/Society; Journalism; Law; Optical Sciences

Ariel Shaver

- **Academics**

- B.S. Systems Engineering, Astronomy and Business Administration minors
- Magna Cum Laude, 2022 Matthew Isakowitz Fellow
- Experiences
 - Research, UASAL Dr. Ewan Douglas
 - JPL and Sentra internships
- Mentors
 - Couldn't have done it without you, Dr. McCarthy!

- **Favorite activities**

- Club leadership (Society of Women Engineers, SEDS)
- Cooking, traveling,
- spending time with family & friends

- **Future goals & plans**

- Summer internship, Hedron
 - Space satellite systems engineering
- MS Aerospace Engineering, Georgia Institute of Technology, Fall 2022



Victoria Jasinski

- **Academics**

- Honors College
- Major: Biomedical Engineering
- Minors: Astronomy/Mathematics

- **Favorite Activities**

- Traveling
- Caring for Mr. Butters
- Watching UofA sports

- **Future Goals and Plans**

- Attending Medical School at the University at Buffalo
- Career Goals: OBGYN/Reproductive Endocrinologist



Desiree Pacheco

Maddie Schliffer

- **Academics**

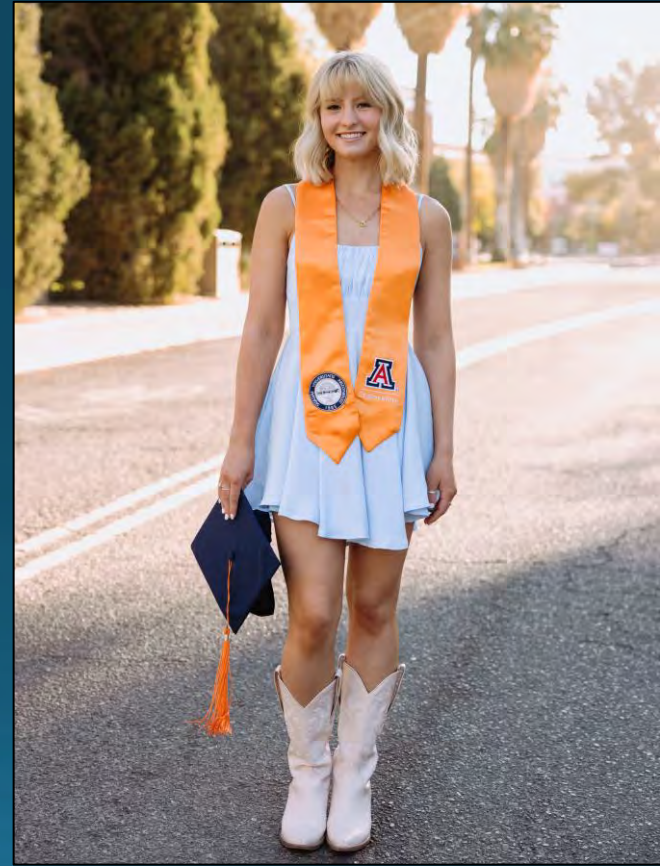
- Major: Aerospace Engineering
- Minor: Astronomical Studies
- Astronomy Advisor: Thomas Fleming
- Research: Dr. Sergey Shkarayev
 - Development of stratospheric flight testing to implement dynamic soaring

- **Favorite Activities**

- Going to concerts
- Hot yoga
- Reading
- Listening to Taylor Swift
- Traveling
- Watching Formula 1 races

- **Future Plans**

- I will be starting a position as an aerodynamics engineer at Boeing in Washington



Senior “Minors” Unable to Attend

Astronomy

Avalon McLeod	Optical Sci
Ashlynn Kiley	Care, Health, Society
Gilbert Degaldo	Computer Sci
Edward Chang	Physics

Astronomical Studies

Sara Porter	Law
Alexander Kaczynsk	Microbiology
Madelyn Huhta	Journalism
Joshua Goudswaard	History
Colby Chambers	Info Sci

Introducing Our Ph.D. Graduates



Director of Graduate Studies
Dr. Kaitlin Kratter

Ryan Endsley

- **Ph.D. Dissertation:**
 - "A Wide-Area View on Reionization and Massive Galaxy Formation"
 - Advisor: Prof. Dan Stark
- **Awards:**
 - University Fellowship
- **Research:**
 - Early galaxy evolution and hydrogen reionization
- **Favorite activities:**
 - Hiking, camping, time with family
- **Future goals & plans:**
 - Postdoc at UT Austin as McDonald Fellow



Katrina Litke (Marslender)

- **Ph.D. Dissertation**

- *"The Interstellar Medium in Gravitationally Lensed Dusty Star-Forming Galaxies"*
- Advisor: Dan Marrone

- **Awards**

- 2021 Steward Teaching Award

- **Research**

- ALMA observations of gas and dust in extremely star-forming galaxies within a billion years of the Big Bang

- **Favorite Activities**

- Music (piano, flute, and more), softball/volleyball, cross stitch, quilting, reading

- **Future Goals and Plans**

- Astronomy Educator at the Bell Museum in Minnesota
- Play with my pets and kid(s)



Yu-Jing Qin

- **Ph.D. Dissertation:**
 - *"Host Galaxy Properties of Supernovae"*
 - Advisor: Dr. Ann Zabludoff
- **Research:**
 - Algorithms for host galaxy matching.
 - Host environments of supernovae.
 - Supernova rates.
- **Favorite activities:**
 - Classical music and performing arts in general.
 - Astrophotography and daytime photography.
 - Barista and microbrewery.
- **Future goals & plans:**
 - Postdoc researcher, ZTF Team at Caltech.



Minghao Yue

- **Ph.D. Dissertation:**
 - *"A Survey for High-Redshift Gravitationally Lensed Quasars"*
 - Advisor: Prof. Xiaohui Fan
- **Awards:**
 - The Department of Astronomy Graduate Student Award in Scholarship
- **Research:**
 - Supermassive Black Holes, Strong lensing
- **Favorite activities:**
 - Basketball, Photography
- **Future goals & plans:**
 - Career in astrophysics academy



Ph.D. Graduate Unable to Attend

Yun-Hsin Huang

CONGRATULATIONS TO EVERYONE!

REMEMBER:

“One gentle dose of starlight to be taken each night just before retiring.”

Leslie C. Peltier



Credit:
Evan Brorby – ASTR major

Advice at Night

A former Director of Steward Observatory (Dr. Bart Bok) had some special advice for observers who were cooped up all night at telescopes:

*"When you are in an observatory at three o'clock in the morning, stop your photograph.
Stop your photometer.*

Walk away from the telescope.

Walk down the stairs.

Walk out the front door.

Now walk 20 paces – no more, no less.

Then stop – and look up at the sky – just to make sure you are making bloody sense."



Celebrate by Looking Up Together



planets line up in the morning sky

Thursday: Image of our black hole

Sunday: Lunar eclipse

Formal Congrats from our Director



Dr. Buell Jannuzi

Time to Celebrate !!

pandemonium



THANKS FOR CELEBRATING TOGETHER!

REMEMBER:

“One gentle dose of starlight to be taken each night just before retiring.”

Leslie C. Peltier



Credit:
Evan Brorby – ASTR major

“Then, like some snowy owl and owlet waking for a night of dark marauding, they spread apart their tight-closed wings, open wide their big round eyes and peer about in all directions. The prey they seek is hidden somewhere in the skies - for these are my observatories.” Leslie C. Peltier