

UA Physics State of Department



Shufang Su • U. of Arizona

Dec 22, 2025

Staff and Student Workers

● 11 Staff + 3 Student Workers

Academic Advisors



Kristy Merdinger
Join Feb, 2025



David Smith



Katie Butcher



Clare DeBuhr



Mike Eklund



Matthew Jones

Business Office



Amy Bai



Mario Calderon



Shane Smith



Kyle Rine

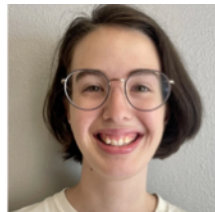


Rohit Singh

Front Office



Sarah Arellano



Adrian Rose



Luca Sakihana



Melissa Walton Join Oct, 2025

Academic Support

IT Support

Lab and Classroom

Thanks You!

Faculty



2025/26 Faculty



Alex Burant



Fuguang Cao



Elliot Cheu



Keith Dienes



Sean Fleming



Nikolay Golubev



Tom Gralla



Mohammed Hassan



Rachel Hyman



Ken Johns



Callum Jones



Tai Kong



Elizabeth Krauss



Sam Krishnamurthy



Andrei Lebed



Brian LeRoy



Jingwei Liu



Srin Manne



Sumit Mazumdar



Stefan Meinel



Fulvio Mella



Drew Millsom



Jan Rafelski



Ajith Rajapaksha



Eduardo Rozo



John Rutherford



Arvinder Sandhu



Ina Sarcevic



John Schaebley



Pooja Siwach



Charles Stafford



Shufang Su



Bira van Kolck



Erich Varnes



Koen Visscher



Weigang Wang



Charles Wolgemuth



Shufeng Zeng

38 faculty
10+ APS Fellows
\$8M+ research grants
19 K+ SCH

Faculty

● 3 new faculty



Callum Jones

Start: August, 2025



Jingwei Liu

Start: August, 2025



Pooja Siwach

Start: August, 2025

Many Thanks to Search Committees!

● Ian Lim join in Jan, 2026 (Assistant Professor of Practice)

Forever on Our Hearts



Bruce Barrett (1939 - 2025)

- ◉ Emeritus Professor, theoretical nuclear physics
- ◉ No-Core Shell Model
- ◉ APS Fellow
- ◉ Humboldt Fellowship, Fulbright Fellow
- ◉ Spearheaded formation of the Phi Beta Kappa Association of Tucson
- ◉ World traveller

Memorial Gathering Oct 2025



Forever on Our Hearts



Don Huffman (1935 - 2025)

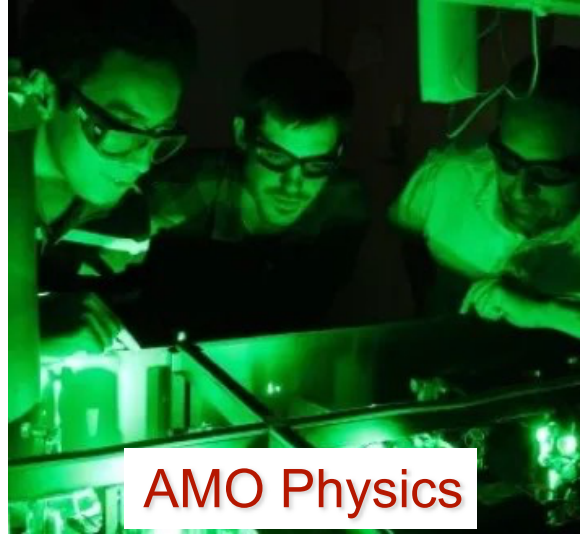
- ◉ Emeritus Regent Professor
- ◉ Massive production of C60 buckyball
- ◉ Monograph: “Absorption and Scattering of Light by Small Particles” (with Bohren)
- ◉ Materials Research Society’s highest award (Gold Medal) 1993
- ◉ Hewlett-Packard Europhysics Prize 1994
- ◉ Long-distance runner



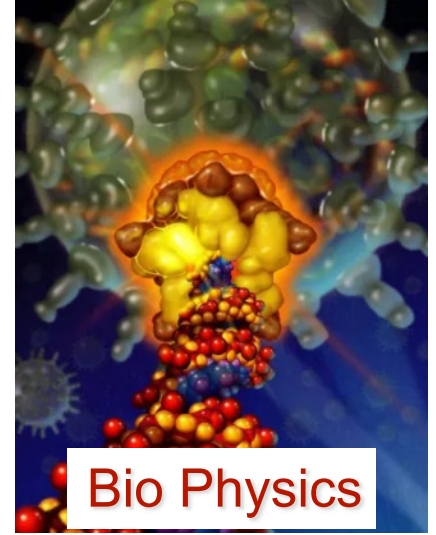
Research



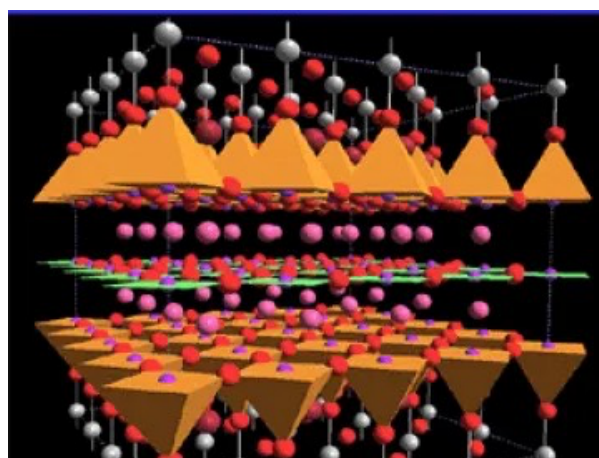
Astrophysics and Cosmology



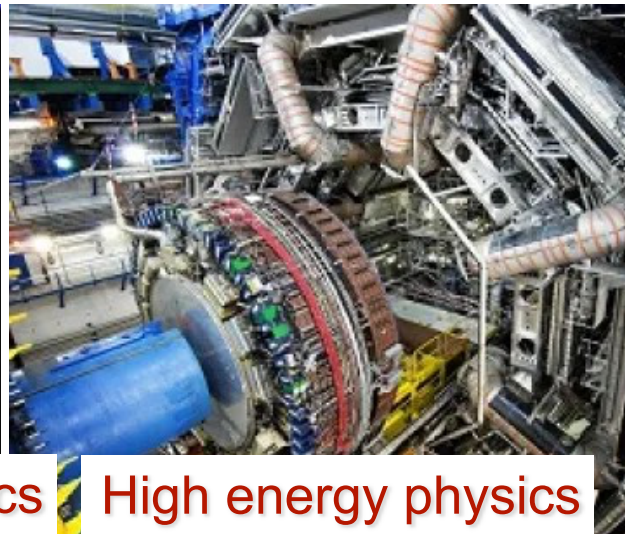
AMO Physics



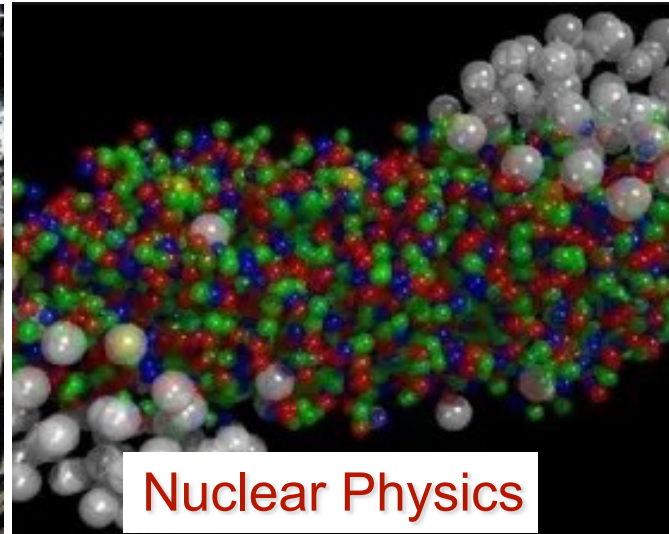
Bio Physics



Condensed Matter Physics



High energy physics



Nuclear Physics

UA Physics

Nobel Prize in Physics 2025



III. Niklas Elmehed © Nobel Prize Outreach
John Clarke
Prize share: 1/3

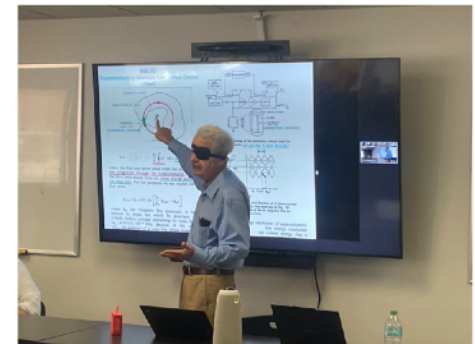
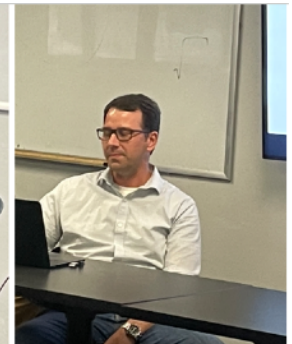
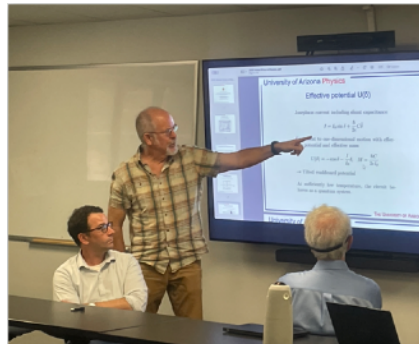


III. Niklas Elmehed © Nobel Prize Outreach
Michel H. Devoret
Prize share: 1/3



III. Niklas Elmehed © Nobel Prize Outreach
John M. Martinis
Prize share: 1/3

The Nobel Prize in Physics 2025 was awarded jointly to John Clarke, Michel H. Devoret and John M. Martinis "for the discovery of macroscopic quantum mechanical tunnelling and energy quantisation in an electric circuit"



Falco, Schaibley, Stafford, Wang

Nobel Celebration of
Quantum 2.0

Monday, Oct 13, 3 pm, PAS 236

Undergraduate Study

- ◉ 300+ undergraduate students with 2 physics majors
 - ◉ Physics major, minor
 - ◉ Applied Physics major



Physics Graduate 2025

Summer 2025

Bachelor of Science in Physics

Devin Ackermann
Aleksandar Antonic
Adel Awad
Christian Burt
Ella Butler
Ruth Dierdorff
Tugg Ernster
Brandon Friend
Jascha Gaarder
Megan Harrison
Aiden Insall

Thomas Joyce
Hannah Kempen
Matan Lagnado
Andrew Li
Matthew Maxim
Nicolas Mazziotti
Colin Murphy
Frederic Penney
Colton Quirk
Eason Wang

Bachelor of Science in Applied Physics

Max Betaille
Liam Falk

Luke Garman
Kudzai Musarandega

Minor in Physics

Alondra Cardona
Swapnaneel Dey
Ava Doty
Ethan Figureido
Animesh Garg
Nikhil Garuda
Jessica Gurney
Aaron Hernandez
Ellen Jesina

Collette "Coco" Larson
Laura Mack
Isabella Olin
Ben Phan
Roswell Roberts
Savannah Smith
Ping Tontrasathien
Maritza Torres

Winter 2025

Saif Alrawaished
Mathew Gills
I-Tzu Huang



Winter 2025

Colin Weber

Undergraduate Study

- ◉ HEBUT Applied Physics program, 350 enrollment.
- ◉ Summer 2025, first graduating cohort.



Graduate Study

- ~ 100 graduate students
- 2025 cohort (10)

Sean Cadigau



Lauren Hallstead
Willet



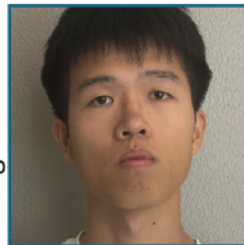
Miu irano



Noah Bliss



Cheng Wu



Harry Wang



Ian Busby



Thesus Manu



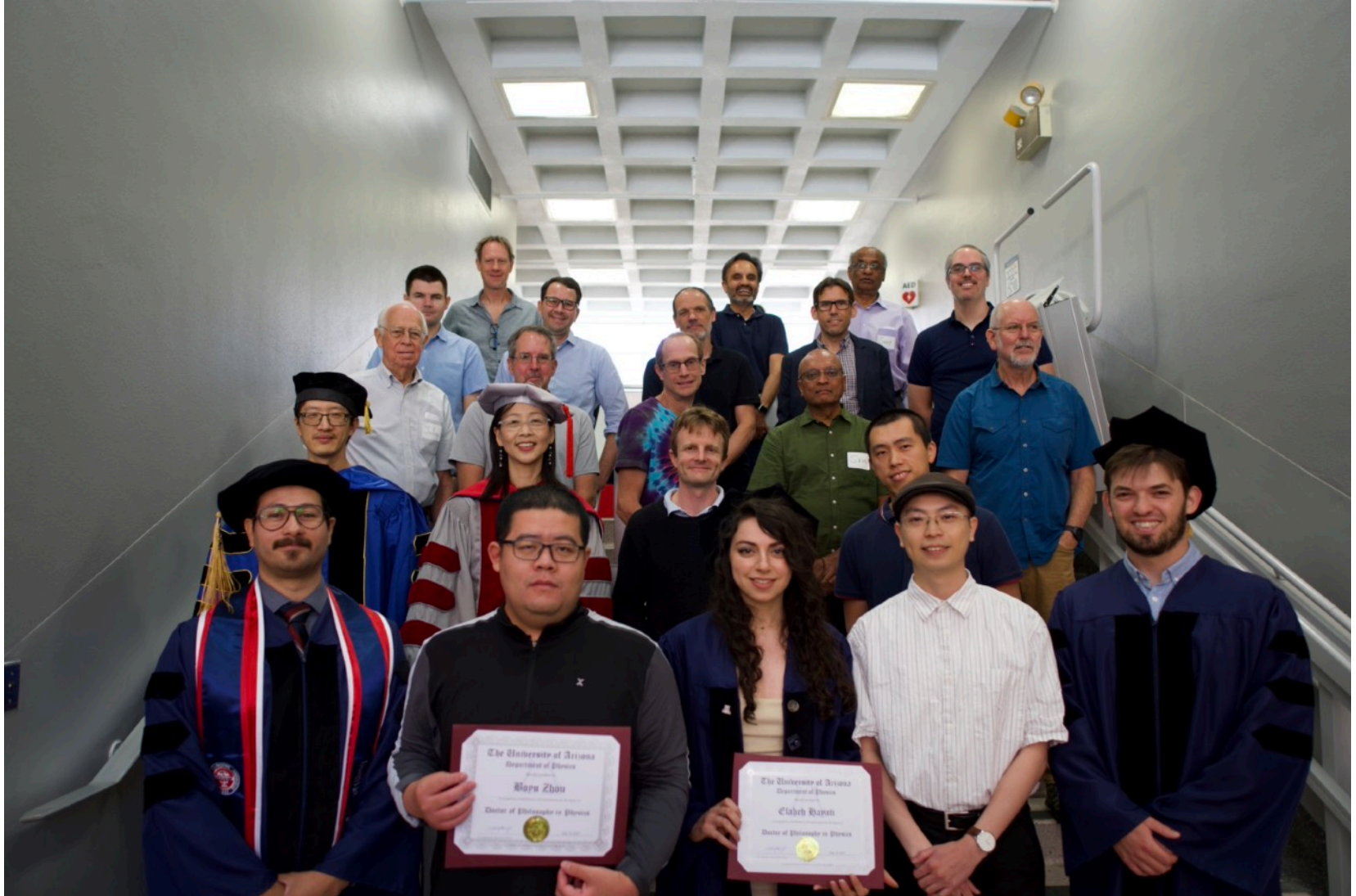
Austin West



Bayli Hayes



Physics Graduate 2025



Physics Graduate 2025



Doctor of Philosophy in Physics

Jose Daniel Castro Cisneros

Pao-Kang Chen

Zhaoyuan Cui

Waverly Gorman

Rohit Gupta

Elaheh Hayati

Ian Pannemarsh

Will Price

Edgar Martin Salazar Canizales

Wei Leong Tee

Tyler Trent

Emily Van Milligen

Caleb Webb

Boyu Zhou



Master of Science in Physics

Pritam Bangal

Sonja Choi

Nicholas Lopez-Canelas

Caleb Webb

Fall/Winter 2025 PhD in Physics

Bowei Zhou

Jesus Ernesto Torres Burruel

Moshe Raphael Nechemiah Chesler

Master Study

Powering the Future of AI:

Semiconductor Science & Technology

A new Accelerated Master's Program (AMP)
A new Master of Science in Physics emphasis

Master core semiconductor manufacturing skills

Explore emerging semiconductor technologies

Interdisciplinary program taught by world-renowned scientists and engineers

4+1

AMP
BS & MS degrees
In five years

2Y

Regular
Master Program

30

minimal
required units

- Semiconductor Physics
- Quantum Mat. & Dev.
- Semiconductor Processing
- Adv. Mat. Characterization
- and more...

Open to students majoring in Physics, Applied Physics, Electrical and Computer Engineering, Materials Science and Engineering, or other closely related disciplines who want to accelerate their path into the semiconductor industry



More information : wgwang@arizona.edu



Center for Semiconductor
Manufacturing



SCHOOL OF SCIENCE
Physics



SCHOOL OF ENGINEERING
Materials Science
& Engineering

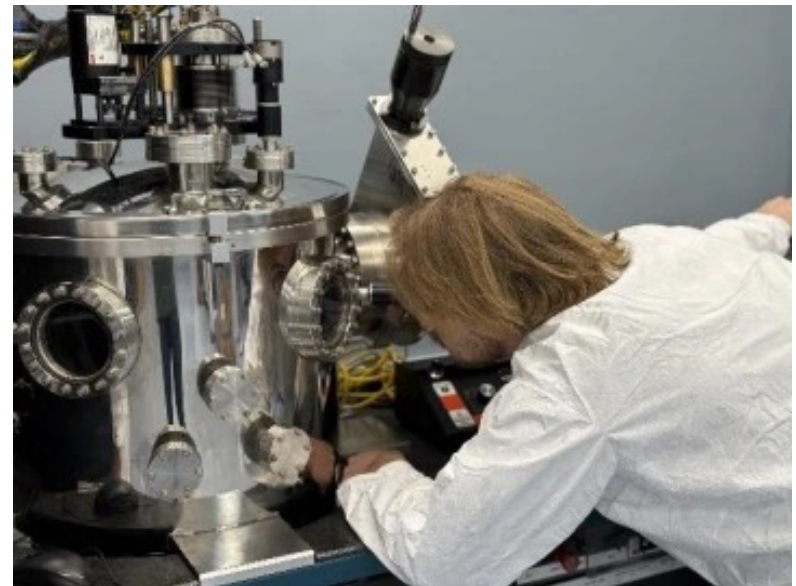


SCHOOL OF ENGINEERING
Electrical & Computer
Engineering

Semiconductor Science and Technology

- ◉ A new Master of Science in Physics emphasis
- ◉ A new Accelerated Master's Program 4+1

FASTLab



Student Accomplishments



Outstanding Graduating Senior

Brandon Friend

Excellence in Undergraduate Research (Physics)

Megan Harrison

Excellence in Undergraduate Research (Astronomy)

Eason Wang

Fall/Winter 2025 Outstanding Senior

Saif Alrawaished



Student Accomplishments



Galileo Circle Scholars

Undergraduate

Jorge Blanquer Rendondo
Nikoli Cooper
Penny Duran
Keenan Fiedler
Grace Gibbins
Vaibhav Joshi
Thomas Nguyen
Rohin Sant

Graduate

M Smith

Liam Falk

Fish out of Water Award



Undergraduate

TIMESTEP Summer Tech Internship 2025



Rohin Sant



Joel Shernicoff



Philip Klaassen



Shashank Verma



Tristan Flores King



Keita Maekawa



Michael Balducci

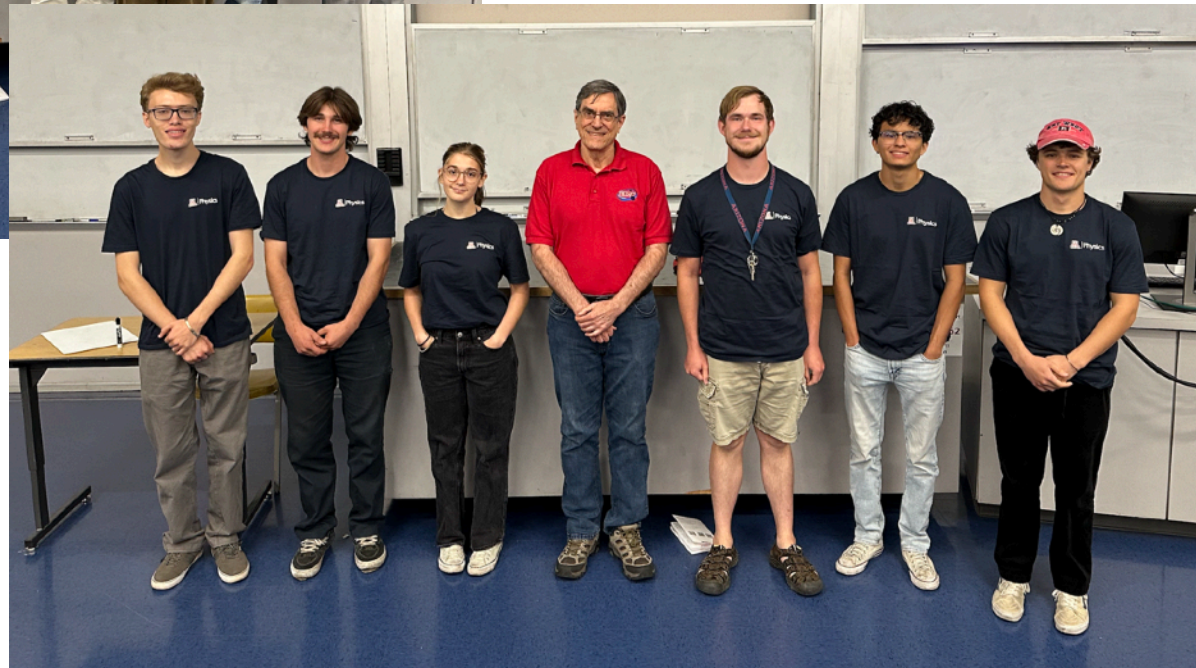
Undergraduate Research

Lucy Engel Undergraduate Research Symposium



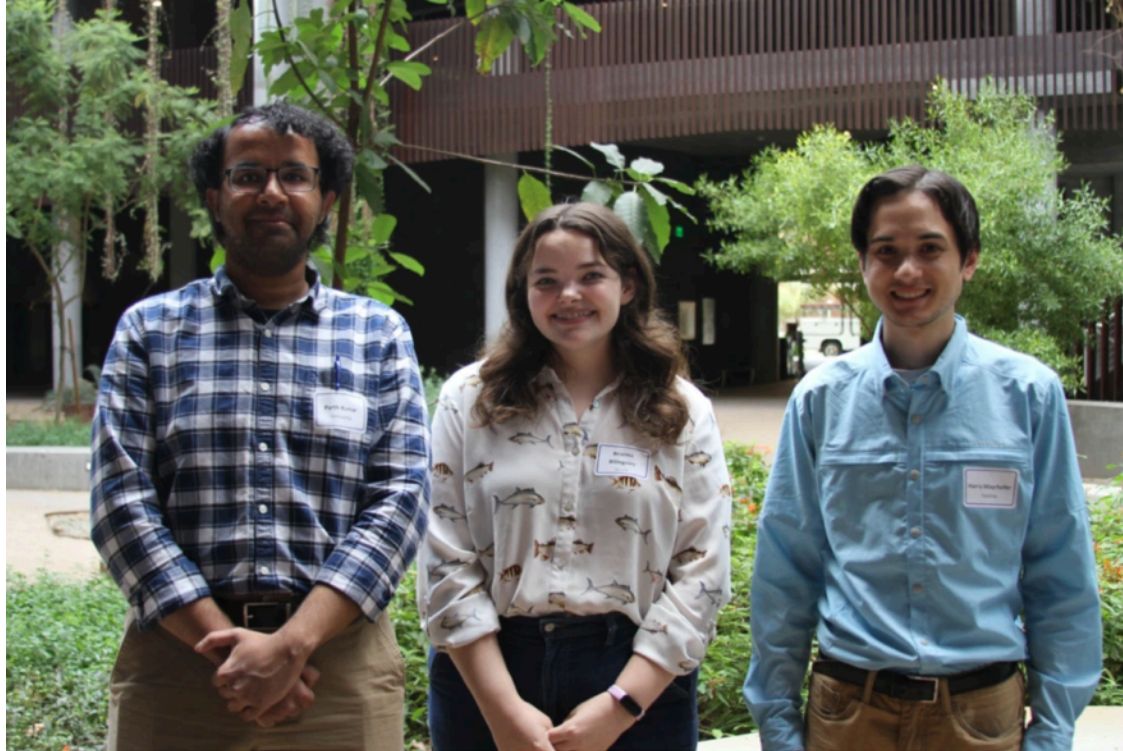
Best Presentation
Aurora Wilde

Best Poster
Frederic Penney



Student Accomplishments

CoS Outstanding Graduate Student Award

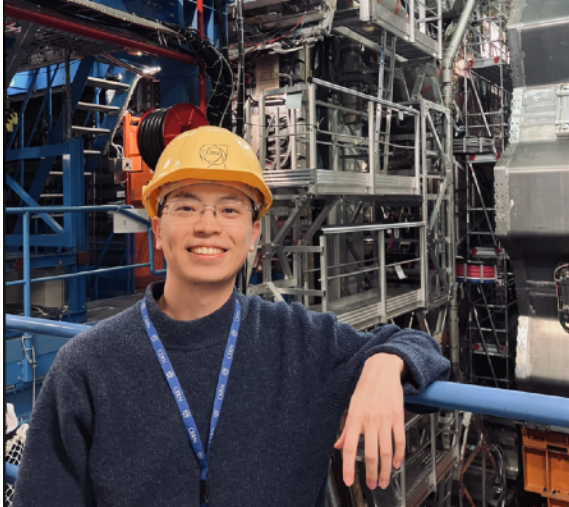


Graduate Scholarship Award: Parth Kumar

Graduate Service Award : Brianna Billingsley

Graduate Teaching Award: Harry Mayrhofer

Student Accomplishments



Maxwell Cui

US ATLAS Outstanding Graduate Student Award

ARCS Scholar

Anna Roche



Maria Mutz



2025 Physics Department Scholarships

The Weaver Award for Undergraduate Research in Physics

Namit Chandak	Suhani Surana
Pranav Chiploonkar	Shashank Verma
Keenan Fiedler	Lauren Whitaker
Vaibhav Joshi	

John A. Leavitt Experimental Physics Prize

Brandon Friend

The William S. Bickel Graduate Fellowship in Physics

Maria Mutz

The Weaver Award for Undergraduate Research in Physics

Namit Chandak	Suhani Surana
Pranav Chiploonkar	Shashank Verma
Keenan Fiedler	Lauren Whitaker
Vaibhav Joshi	

John A. Leavitt Experimental Physics Prize

Brandon Friend

The William S. Bickel Graduate Fellowship in Physics

Maria Mutz

Fanfare Graduate Travel Award

Brianna Billingsley
Dipayan Biswas
Nisnat Chakraborty
Annyun Das
Ali Habiboglu
Parth Kumar
Michael McDonnell
Maria Mutz
Jeremy Philbrick
Anna Roche
M Smith
Erik Wessel

Awards and Accomplishments



Brian LeRoy

Undergraduate Teaching Award
(Service Course)



Sumit Mazumdar

Undergraduate Teaching
Award (Major Course)



Charles Starfford

Graduate Teaching Award



Stefan Meinel
Service Award



Amy Bai
Outstanding Staff Award
CoS Staff Excellence Award



Kyle Rine
Outstanding Outreach

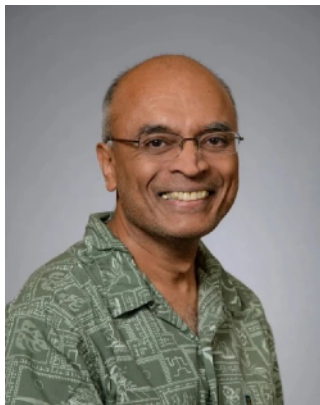
Awards and Accomplishments



Navin McGinnis
CoS Galileo Circle Postdoc Award



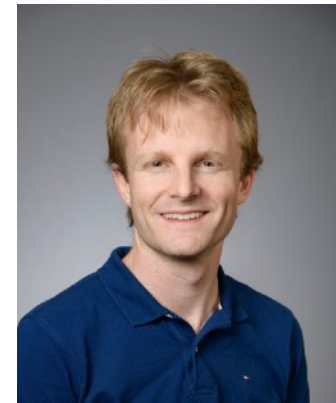
John Schaibley
ORP Inaugural Fellow for Quantum



Srin Manne
CoS Distinguished
Career Teaching Award



Brian LeRoy
Innovation in Teaching Award



Sam Gralla
Blitzer Award for
Excellence in Teaching

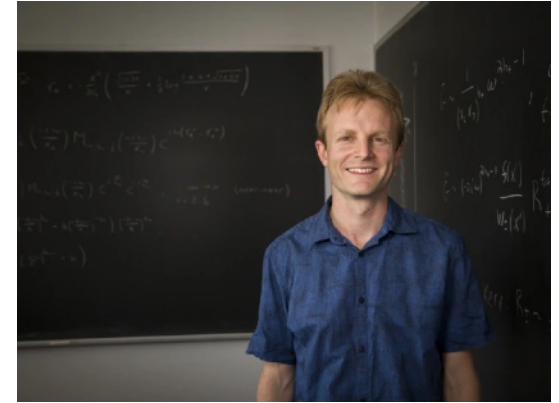
Awards and Accomplishments



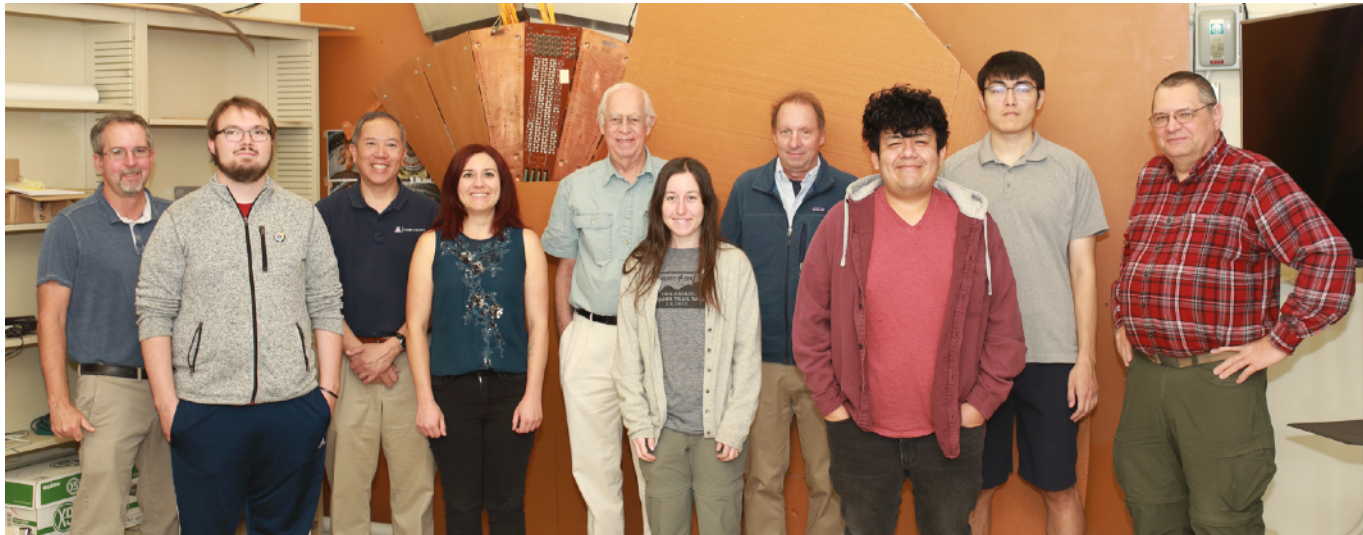
Eduardo Rozo
Cottrell SEED Award



John Schaibley
Moore Foundation Award 1.3 M

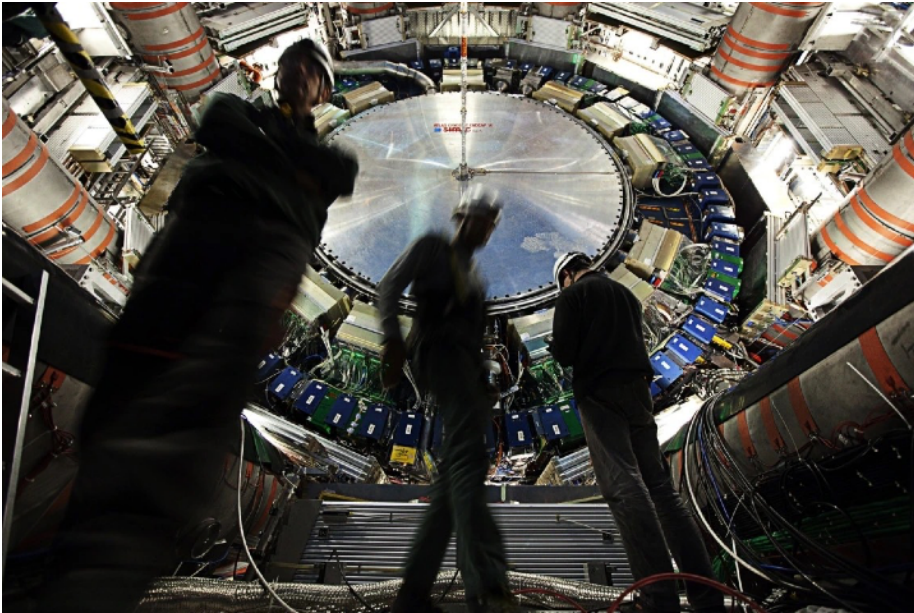


Sam Gralla
APS Fellow



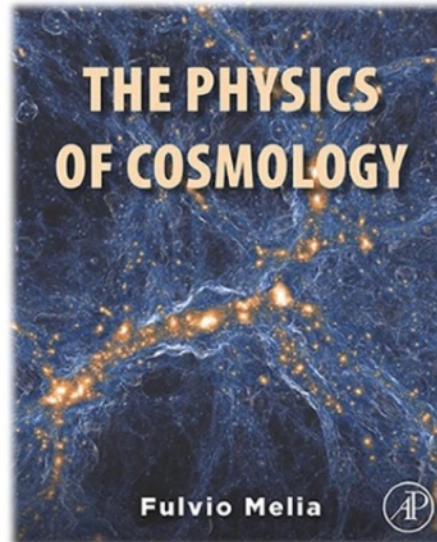
UA ATLAS Group
R&D Funding for
Future Higgs Factory
Detector

Awards and Accomplishments

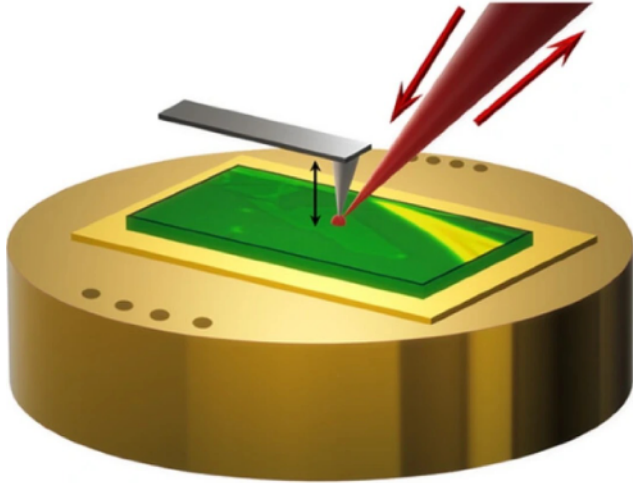


UA Physics ATLAS Group
among winners of
Breakthrough Prize in Fundamental Physics

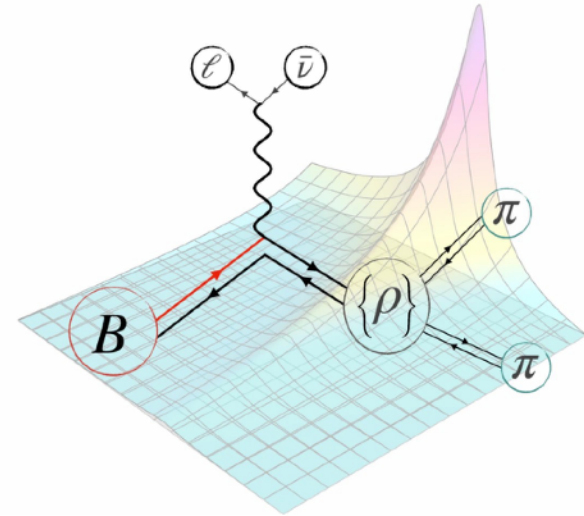
Fulvio Melia
The Physics of Cosmology
April 1, 2026



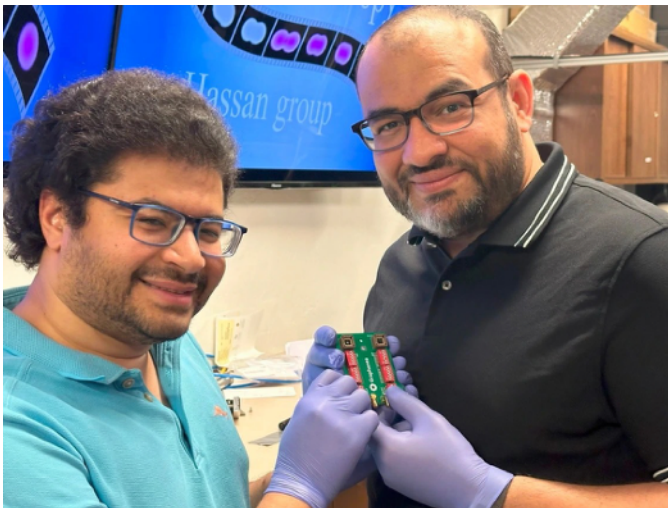
Research Highlights



Brian LeRoy, John Schaibley, Anna Roche
Nano-Scale Images of Exciton Spectrum

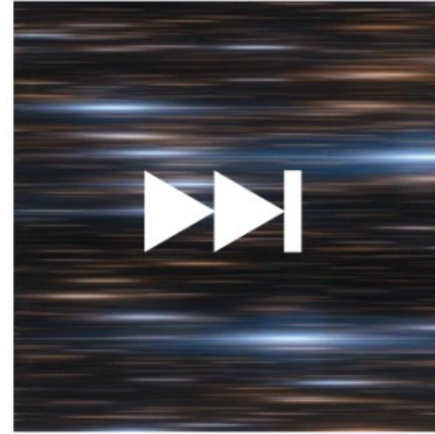
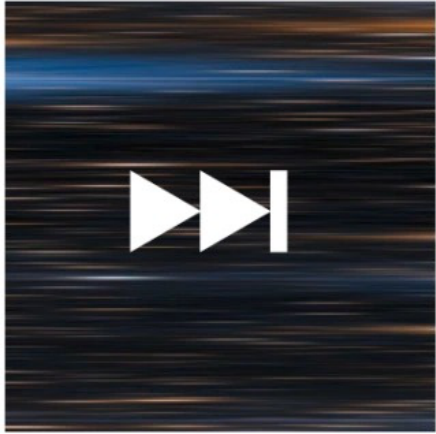


Stefan Meinel, Luka Leskovec
Lattice QCD Research
PRL Editor's Suggestion



Mohammed Hassan, Mohamed Sennary
Quantum Uncertainty Dynamics of Ultrafast Light
Pulses
Petahertz-speed transistor

Research Highlights



Keith Dienes, Brooks Thomas, Lucien Haitier, Jonah Barber
The Universe on Pause

LeRoy and Schaibley Group
Superfluidity in 2D



Activities



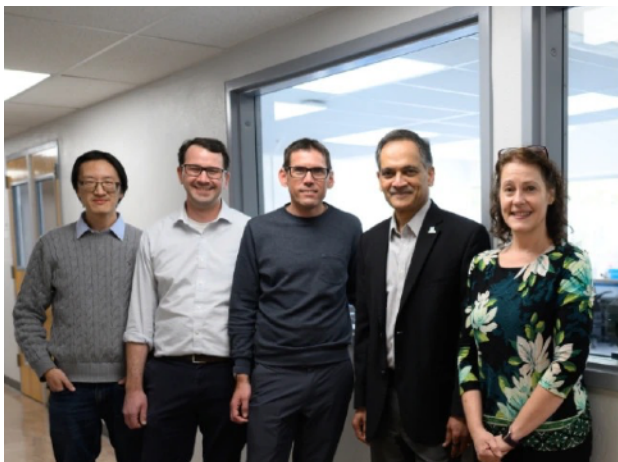
Quantum Research Initiative Workshop

Organized by John Schaibley



SCET 2025

Organized by Prof. Sean Fleming

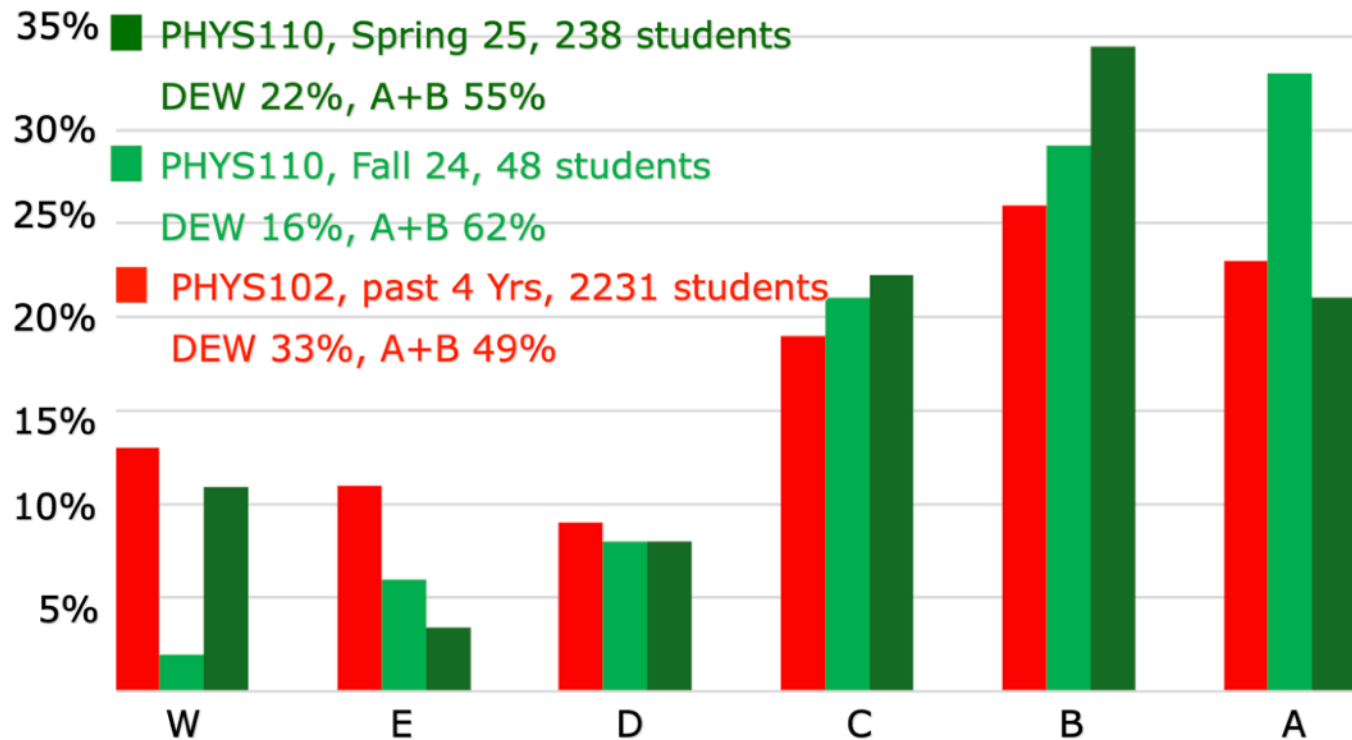


UA President Garimella and CoS Dean Garzione visited Physics Department

- Nanoscale Quantum Science Lab
- Introductory Physics Studio Classroom
- FASTLab

Studio Class

Fig 1: Algebra Based Introductory Physics Grades



1st Studio Class PHYS 110 fully launched in Spring 2024

2nd Studio Class PAS 111 will be fully launched in Spring 2025

20% increase in enrollments

Alumni News



HosteProf. Sera Markoff (PhD 2000)
Appointed Plumian Professor of
Astronomy and Experimental Philosophy
University of Cambridge

Felix Kling (PhD 2016)
2025 Frontier of Science Award



Hongji Wei (BS 2024)
APS LeRoy Apker Award Finalist

Gifts



Left: Kenneth and Paula Krane
Right: John Engel

Studio Classroom II



Graduate Scholarship Endowment Dale and Jenny Shellhorn



Fanfare Travel Award Endowment

Michael Fan (son of Charlie Fan)

Student Organization: Physics Club



Physics Club

President: Tyler Brown

Vice President: Julien Barrosse

Treasurer: Ewan Wolgemuth

Secretary: Kira Reyes

Event Outreach Coordinator: Adrian Rose

Social Media Coordinator: Hannah Gruber

<https://uaphysicsclub.weebly.com/>



Student Organization: PIE

PIE: Physicists for Inclusion and Equity

President: Chloe Marzano

Vice President: Aaron Bartleson

Treasurer: M Smith

Secretary: Clarissa Pavao

Outreach Coordinator: Charlotte Zehnder

<https://arizona.campusgroups.com/club1139/home/>

Slice of Pie
"kipisi pi pan poki!"
~ L ~ U ~

How to speak Toki Pona
(the world's cutest made-up language)

Presenter: Aaron Bartleson
Location: PAS 236
Time: Wednesday, 9/24/25, 4:00-5:00 PM

(free snacks!)
"pooka a!"

Yap About Physics

Come talk about physics with us!
(we have snacks)

YAP is a student-led physics discussion group open to undergraduates and graduate students of all majors!

If you're interested in attending our twice-monthly meetings, please fill out this form! (Meeting time TBA)



<https://forms.gle/buNro52nUInviGgZ6>



PHYSICISTS FOR INCLUSION & EQUITY

EARTH DAY BAKE SALE

PIE Culture Event 2025 March

The Mongolian Ethnic Group In China

Hosted by Xingzhou Yu

26th March, 2025, Wednesday • 1:00 PM • PAS 236

MONGOLIAN MILK TEA AND SNACK PROVIDED.

EVERYONE IS WELCOME! BRING YOUR FRIENDS!

More details contact:
Xingzhou Yu xingzhou@arizona.edu
Ling Gan linggan@arizona.edu

SPOOKY-GRAMS PIE FUNDRAISER

Send your friends a spooky gift bag with a personal message, Halloween candy, and more!

Fill out this form to order one. Pick up between 10/27-10/31.

Price range: \$2-\$8

Physicists for Inclusion & Equity

Contact: cpavao@arizona.edu
ChloeMarzano@arizona.edu

Pizza & Profs

Grab Pizza and chat with Professor Pooja Siwach (gluten/dairy free food options too)

PAS 274 12:00 PM to 1 PM, Nov 12

Physicists for Inclusion and Equity

PIE Study Group

- Get help from more senior students!
- Nonjudgmental space welcome to everyone
 - ~ Neurodivergent and neurotypical alike
 - ~ Grads or Undergrads
- Brain food a.k.a. SNACKS!!

Wednesdays 5 - 6pm

PAS 443 (Astro-Lounge) 4th Floor South Wing

Student Organization: Graduate Student Council



Grad Student Council

Master of Ceremonies: Karl Hauser

Pizza Lunch Coordinator: Jack O'Brien

Grad Lounge Coordinator: Erik Wessel

Grad Talk Coordinator: Forrest Guyton

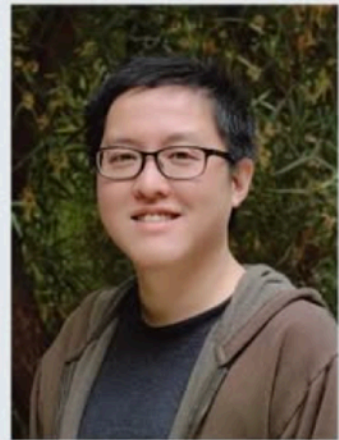
LSS Viscount: Carter Eckel

Student Activities



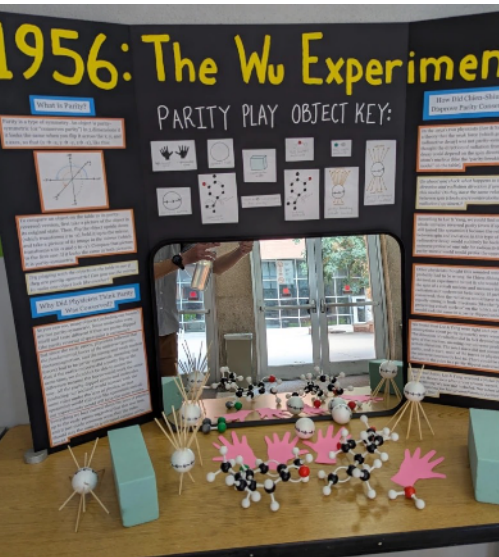
UA Physics Team won the 2nd place
US Physicist' Tournament

Physics Meet Yourself

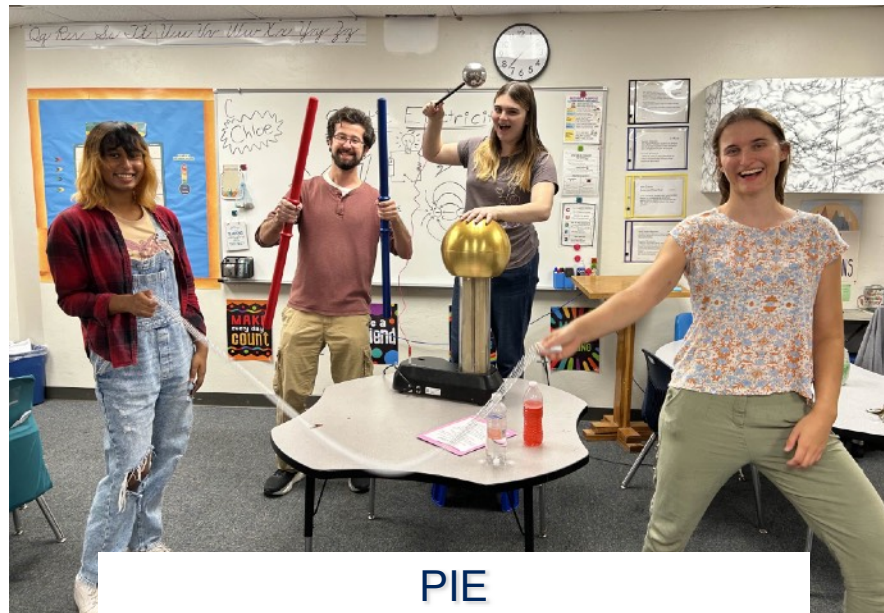


Students vs Faculty

Outreach Activities



Maria Mutz (PhD)
Interactive Physics
History exhibit



PIE
Lineweaver Elementary School
La Paloma Academy



PHYSICS PHUN NIGHT AT THE UNIVERSITY OF ARIZONA A SCIENCE SHOW FOR ALL AGES

ADMISSION IS
FREE!

COME SEE
SCIENTISTS TEST THE
LAWS OF PHYSICS!
A NIGHT OF FUN, FIRE,
ICE, ELECTRICITY AND
EXCITEMENT!

SUNDAY MARCH 2ND, 2025
3:00 PM - 4:15 PM
PHYSICS AND ATMOSPHERIC
SCIENCES BUILDING, ROOM
201
1118 E. 4TH STREET



OUR FACEBOOK
PAGE



THE UNIVERSITY
OF ARIZONA

*QUESTIONS:
CONTACT KYLE RINE,
KPRINE@ARIZONA.EDU

Department of Physics
College of Science
1118 E. 4th Street
Tucson, Arizona 85721
www.physics.arizona.edu

Kyle Rine &
Student Volunteers
Physics PHUN Night

Outreach Activities



UA Physics Booth
2025 Tucson Festival of Books
Science City Exhibition



Physics Club, PIE
Science Museum
Spooktacular Science



Department Life



JOIN US FOR SOME MORNING FOOD AND DRINKS

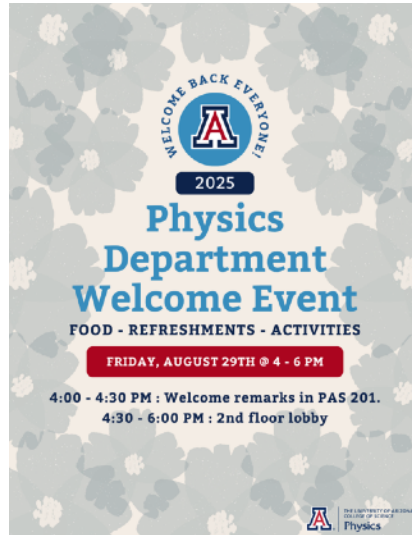
Physics Department Weekly Coffee and Tea Time

MONDAY MORNINGS

10:15 AM - 11:15 AM

PAS 274

Everyone from the Physics
Department is welcome!



Department Life



Physics Newsletter

To view this email as a web page, go [here](#).

THE UNIVERSITY OF ARIZONA



Newsletter

DECEMBER 2025 Vol 1. Issue 1.

The Saguaro Spacetimes



A Message From Our Department Head, Shufang Su

After a pause of almost twenty years, I am delighted to announce the revival of the University of Arizona Physics Department newsletter (previously called *Physics Matters*). With this issue, we relaunch our department's tradition of sharing news, achievements, and reflections from our community under a new name: ***The Saguaro Spacetimes***.

HEBUT Exchange Program



World Ranking



UA tied for **No. 50** in the world in **the Physics Sciences**
in Times Higher Education's World University Ranking by Subject 2025
No. 24 in the US, **No. 11** among US Public Universities



Season's Greetings

Thank you for staying connected and close
to UA Physics in this and every season.

May the force be with you!