



# Department of Physics

State of the Department





# State of the Department?

Obviously, the state of the department is GREAT!





Frankly, I do not really know @

# Welcome to Matriculating PhDs



# They are amongst the best





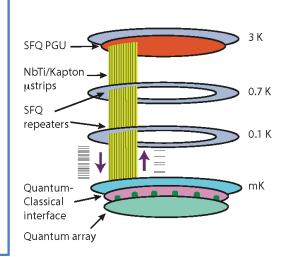
#### MASTER OF SCIENCE IN PHYSICS-QUANTUM COMPUTING



# THE UNIVERSITYOF WISCONSIN-MADISON DEPARTMENT OF PHYSICS



- Starts September 2019
- Designed for completion in one calendar year
- Offers a blend of :
  - Classroom training
  - Independent projects
  - Laboratory experience
- Only MS-P-QC Program in the US
- Apply at <a href="https://grad.wisc.edu/">https://grad.wisc.edu/</a>
- Application Deadline: March 15, 2019



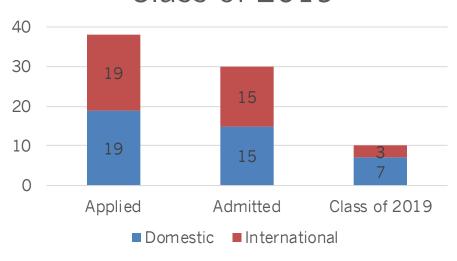
Be one of the first to take advantage of this unique opportunity! Quantum computing and quantum information is a very rapidly growing field with fantastic career opportunities.

Learn more at https://www.physics.wisc.edu/mspqc

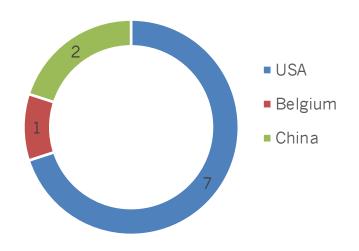


# MS in Physics-Quantum Computing

# Admissions & Incoming Class of 2019



Incoming Class of 2019 Citizenship

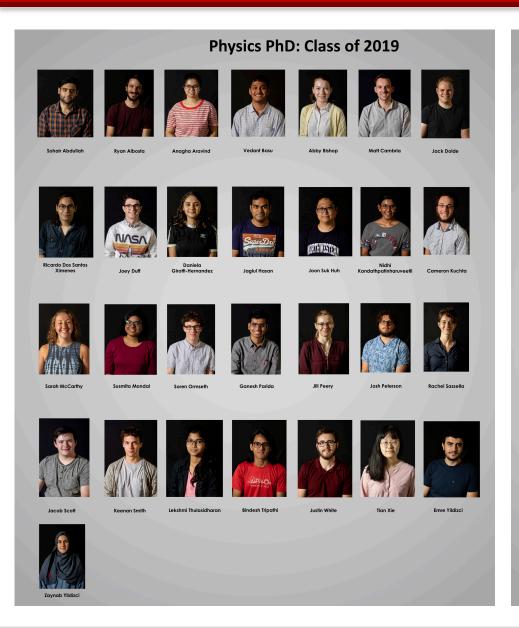


Thanks to Bob Joynt for conceiving and implementing the plan with Michelle Holland and the quantum information science faculty.

Looking forward to a great start in Fall 2019.

# Welcome to Matriculating Grads





#### **MS Physics-Quantum Computing** Class of 2019 Yi David Ryan Feng Morser Leong Carlos Josh Paul **Owens Totzke** Ramer Reid Delano Jacques Van Damme Vorbach Yoder

# We are a big group of people!



Our friends from 2018



# We are a big group of people!







# We are a big group of people!





# Department of Physics Faculty

#### **Physics Faculty**

Department Chair



Professor Sridhara Dasu High Energy Physics 2320A Chamberlin 4289 Chamberlin phone: 262.3678 dasu@hep.wisc.edu

Associate Chair

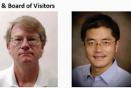


Professor Mark Rachowski Condensed Matter Theory 5114 Chamberlin phone: 265.2876 rzchowski@physics.wisc.edu



Professor Bob Joynt Condensed Matter Theory 5328 Chamberlin phone: 263.4169

Associate Chair. **Alumni Relations** 



Assoc. Prof. Yang Bai Phenomenology 5211 Chamberlin phone: 265.3242 yangbai@physics.wisc.edu



Professor Baha Balantekin Astro Theory, High Energy Theory, Neu/Nuc Theory 5277 Chamberlin phone: 263.7931



5295 Chamberli phone: 262.8908 barger@physics.wisc.edu



Asst. Prof. Keith Bechtol 6203 Chamberlin phone: 262,5916 kbechtal@wisc.edu



Professor Stanislav Boldyrev Plasma Theory 3273 Chamberlin phone: 262.2338 boldyrev@wisc.edu



High Energy Physics 4217 Chamberlin phone: 262,1232 kblack@hen wisc edu



High Energy Physics 4223 Chamberlin phone:262.8894 those@wisc.edu



Asst Prof Victor Bran Condensed Matter Experiment 5332 Chamberlin phone: 262,2485 vbrar@wisc.edu



Professor Duncan Carlsmith High Energy Physics 4285 Chamberlin



Professor Dan Chung Astro, Cosm Theory, High phone: 265.3133 danielchung@wisc.edu



Assoc. Prof. Jan Egedal Plasma 3275 Chamberlin phane: 262.3628 egedal@wisc.edu



Professor Sue Coppersmith 5334 Chamberlin phone:262.8358 snc@physics.wisc.edu



Professor Mark Eriksson Condensed Matter 5118 Chamberlin phone: 263.6289



Professor Lisa Everett Phenomenology/String Theory 5215 Chamberlin phone: 262,4699 leverett@wisc.edu



Professor Cary Forest 3277 Chambarlia phone: 263 0486



Professor Pupa Gilbert Bio Physics 5116 Chamberlin phone: 262.5829



Professor Francis Halzen Astro Theory, IceCube Phenomenology 5293 Chamberlin phone: 262,2667 halzen@icecube wisc edu



Professor Kael Hansor IceCube 4207 Chamberlin phone: 262.3395



Professor Aki Hashimoto Professor Matt Herndor High Energy Physics String Theory 5209 Chamberlin 4279 Chamberlin phone: 265.3244



Condensed Matter Theory 5120 Chamberlin phone: 890.0974



Professor Jim Lawler 1334 Chamberlin phone: 262.2918



Professor Albrecht Karle Astroparticle, IceCube 4287 Chamberlin phone: 263.3279 karle@icecube.wisc.edu



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Professor Dan McCammon Astro Physics 6207 Chamberlin phone: 262.5916 mccammon@physics.wisc.edu



Professor Robert McDermott Condensed Matter 5112 Chamberlin Phone: 263.4476 rfmcdermott即wisc.edu



Professor Marshall Onellion Condensed Matter 5104 Chamberlin phone: 263,6829



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High Energy Physics 4283 Chamberlin phone: 262.9569 pan@hep.wisc.edu



Experimental High Energy Physics 4209 Chamberlin Hall phone: 262,3989 brebel@wisc.edu

Assoc Prof. Brian Rebel



5330 Chamberlin msaffman@wisc.edu

Professor Mark Saffman



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phone: 265.3285 shim@nlwsics.wise.edu



Plasma Theory 3283 Chamberlin

phone: 263,0487

Cosmology 6209 Chamberlin Telephone: 890.2002 pttimbie@wisc.edu





Asst. Prof. Justin Vandenbroucke Astro, IceCube, Neu/Nuc 4114 Chamberlin Telephone: 265.2427 vandenbrouck@wisc.edu



Condensed Matter Theory 5318 Chamberlin phone: 262,5425



Professor Thad Walker Atomic 5322 Chamberlin phone: 262,4093



High Energy Physics 4225 Chamberlin phone: 262.5878



5320 Chamberlin phone: 263.9399 vavuz@wisc.edu



Astronomy & Plasma Theory 6281 Chamberlin phone: 262.7921 zweibel@astro.wisc.edu



 $f_{faculty} = 44.25$ 

# People Count!



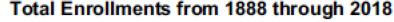
Role	Count
Non-major UG Students Served (<300-level)	2867
Physics Majors (Including AMEP, AP, double majors)	~175
Graduate Students	~186
Non-faculty Research Staff	~95
Faculty	44.25
Non-faculty Teaching Staff	11
Technical Staff	11
Administrative Staff	7
Emeritus Faculty	26
Affiliated Faculty	10
Total (Excluding Service course UGs)	~3400 (~500)

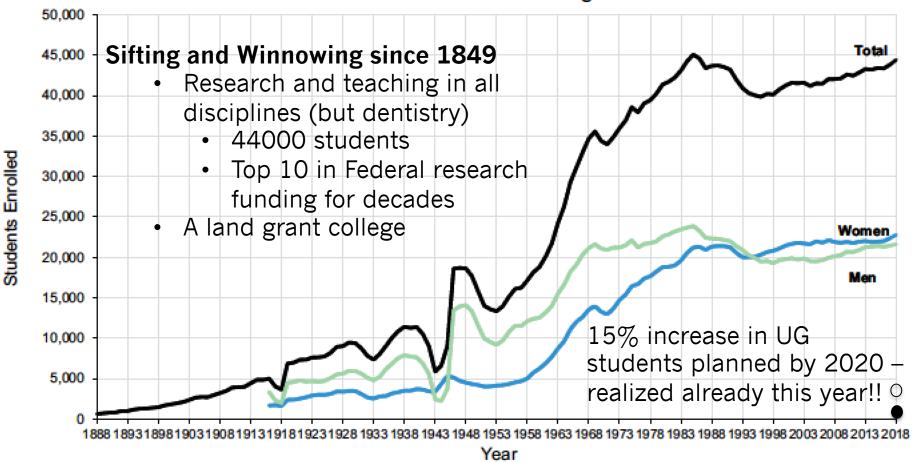
I certainly can't keep track of what 500 people are up to – some times I have trouble keeping track of what I am doing myself!

We do a lot of stuff!

# Yet, tiny by UW-Madison Scale







ACADEMIC PLANNING & INSTITUTIONAL RESEARCH, OFFICE OF THE PROVOST • VICE CHANCELLOR FOR FINANCE & ADMINISTRATION

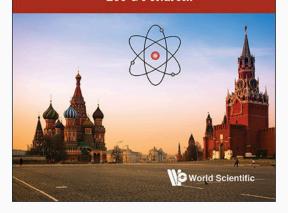
While general UG population is diverse, physics population is far from it.

# **UW Physics : News & Events**





Lee G Pondrom



### The Soviet Atomic Project

#### **How the Soviet Union Obtained the Atomic Bomb**

https://doi.org/10.1142/10865 | October 2018

Pages: 784

By (author): Lee G Pondrom (University of Wisconsin-Madison, USA)

Full Book View 

✓ Tools 

✓ Share

# **UW Physics : News & Events**



Pupa Gilbert wins David A. Shirley Award for Outstanding Scientific Achievement at the Advanced Light Source Tuesday, October 16, 2018

The David A. Shirley Award for Outstanding Scientific Achievement at the Advanced Light Source has been awarded to Professor Pupa Gilbert for her development of Polarization-dependent Imaging Contrast (PIC)-mapping to image the orientation of carbonate nanocrystals in marine biominerals



Prof. Victor Brar receives Moore Inventor Fellowship Thursday, November 15, 2018

The University of Wisconsin–Madison physics professor has developed a light source to fill a niche where lasers are too expensive and LEDs inefficient, and the Gordon and Betty Moore Foundation has named him to its 2018 class of Moore Inventor Fellows.

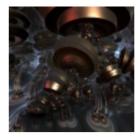


# **UW Physics : News & Events**



### UW Making Big Investments in Quantum Science Tuesday, March 5, 2019

"UW-Madison awarded its first Ph.D. in physics in 1899 and has a strong tradition of research in physics and its subfields," says Steve Ackerman, UW-Madison associate vice chancellor for research in the physical sciences. "And today, by the investments we are making in quantum science and technology, we are building on that tradition and leading the way in concepts and technology that may revolutionize computing, communication, security and more."



**Full Story** 

### UW-Madison joins Chicago Quantum Exchange research hub Thursday, February 28, 2019

UW-Madison is joining forces with the University of Chicago, the U.S. Department of Energy's Argonne National Laboratory and Fermi National Accelerator Laboratory, and the University of Illinois at Urbana-Champaign in developing a national leading collaboration in the rapidly emerging field of quantum information.

### Sau Lan Wu featured in OnWisconsin Thursday, June 27, 2019

In an article titled, "A Pioneer's Preserverence," Preston Schmitt describes the inspiring story of Physics Professor Sau Lan Wu:

The UW–Madison Vilas Professor's story is a lesson in dichotomy. She grew up in dire poverty on the streets of Hong Kong as her wealthy father traveled the globe as the Ginger King, so named for his success in the preserved-ginger industry. She had \$40 to her name when she arrived in the United States — 10 years later, she had a PhD from Harvard. And then she devoted her life to a rarely reciprocal field dominated by men.

Wu has played a core role in three major discoveries in particle physics, advancing what we know about the tiniest parts of matter — and therefore, the world around us. Along the way, she's advised more than 60 UW graduate students and 40 postdoctoral researchers.



#### **Full Story**

### Fatima Ebrahimi PhD'03 featured in OnWisconsin Thursday, June 27, 2019

In "A Driving Force," Stephanie Awe writes about Fatima Ebrahimi's quest with roots in the UW-Madison Physics Department:

Fatima Ebrahimi PhD'03 is determined to unravel one of today's most pressing needs. Ebrahimi is a principal research physicist in the Princeton Plasma Physics Laboratory's Theory Department and an affiliated research scholar in Princeton University's Department of Astrophysical Sciences. She strives to fully understand what many believe could be the answer to unlimited, clean, and reliable energy: nuclear fusion. She mirrors the very subject she studies, driven by seemingly limitless energy to help direct the future of the field.





### Chancellor's Award for Excellence in Leadership: Susan Nossal Tuesday, April 30, 2019

The university's large introductory physics classes can be daunting to students, especially those who had limited exposure to the discipline in high school. In collaboration with others, Susan Nossal founded the Physics Learning Center 14 years ago to create a welcoming space for these students. The concept began as the Physics Peer Mentor Tutor Program, now the center's core. Each semester, carefully trained undergraduates and staff members assist more than 150 students, many experiencing challenging circumstances inside and outside the classroom. The students develop confidence not only in physics, but in university life in general. Some go on to become tutors in the program themselves. Nossal sets a warm tone. Her caring demeanor and devotion to social justice foster powerful connections with students who may feel isolated or frustrated. Tenacious and resourceful, she's grown the center into a forceful vehicle for student success.

Photo: Susan Nossal works on optical calculations with undergraduate students Matthew McAllister and Hanna Khan in a classroom at Chamberlin Hall.

Photo Credit: Jeff Miller



# Duncan Carlsmith's innovative smart phone dropping physics course Monday, July 1, 2019



Smartphones get a workout in a two-semester accelerated introduction to physics for potential University of Wisconsin–Madison physics, astronomy, and applied math, engineering and physics majors.

Phones get dropped, says Duncan Carlsmith, a professor of physics. They get thrown like a football. They get strapped to a pendulum or lashed to a bicycle.

Later, the phones spew out the data gathered by a surprisingly broad array of sensors: accelerometers, gyroscopes, audio and light sensors, magnetometers, and a precise timer.



### Prof. Francis Halzen awarded 2019 Yodh Prize Friday, July 26, 2019

Professor Francis Halzen, PI of the IceCube Neutrino Observatory, was awarded the 2019 Kanwal & Gaurang Yodh Prize at the 2019 International Cosmic Ray Conference. He was honored for "his leadership and landmark contributions that cleared the path for the emergence of neutrino astronomy."

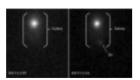


Keep up with ICRC2019 here

Multimessenger collaboration between the Dark Energy Survey and IceCube leads to sensitive search for cosmic neutrino sources
Friday, July 26, 2019

Over the past two years, scientists in the Dark Energy Survey (DES) have been following up realtime neutrino alerts from IceCube with deep optical telescope imaging in search of supernovae that might be the origin of high-energy astrophysical neutrinos.

#### Full story and submitted paper





## Researchers recreate the sun's solar wind and plasma "burps" on Earth Tuesday, August 6, 2019

A new study by University of Wisconsin–Madison physicists mimicked solar winds in the lab, confirming how they develop and providing an Earth-bound model for the future study of solar physics.



The Big Red Ball was turned into a laboratory model of the Sun

## Thad Walker elected to chair DAMOP Tuesday, April 30, 2019

Professor Thad Walker has been elected to be vice-chair of the APS Division of Atomic, Molecular and Optical Physics (DAMOP). He will serve as the chair starting in 2021.



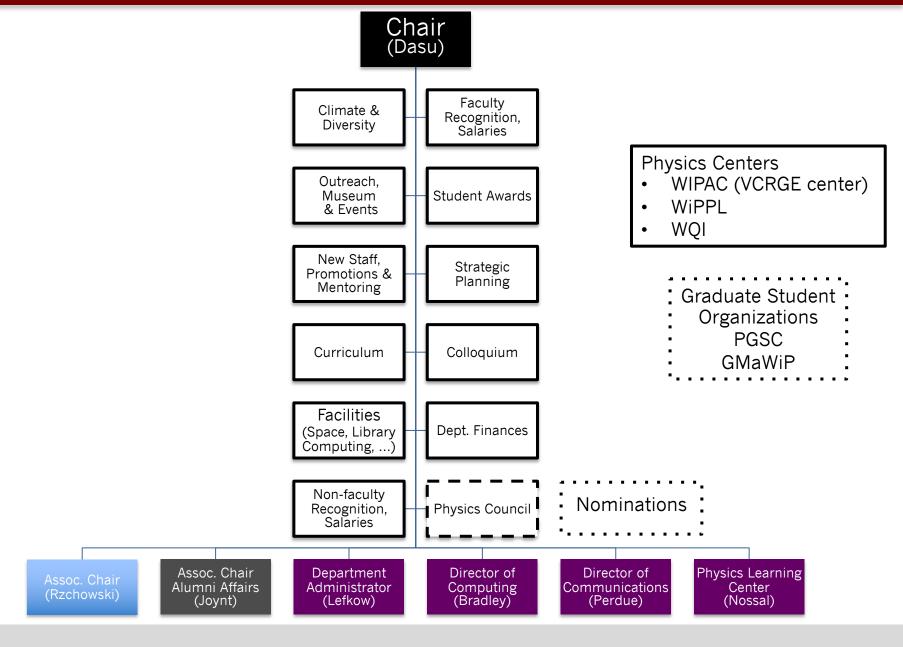
# Thank You Wesley!

Your students, post-docs and colleagues will benefit from your passion for physics and teaching for years to come!



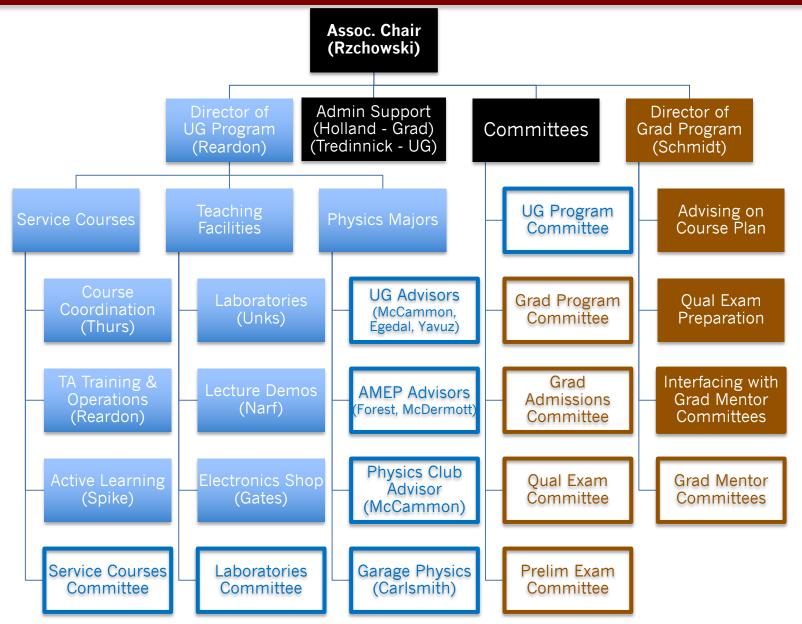
### **Department of Physics (2018-19)**





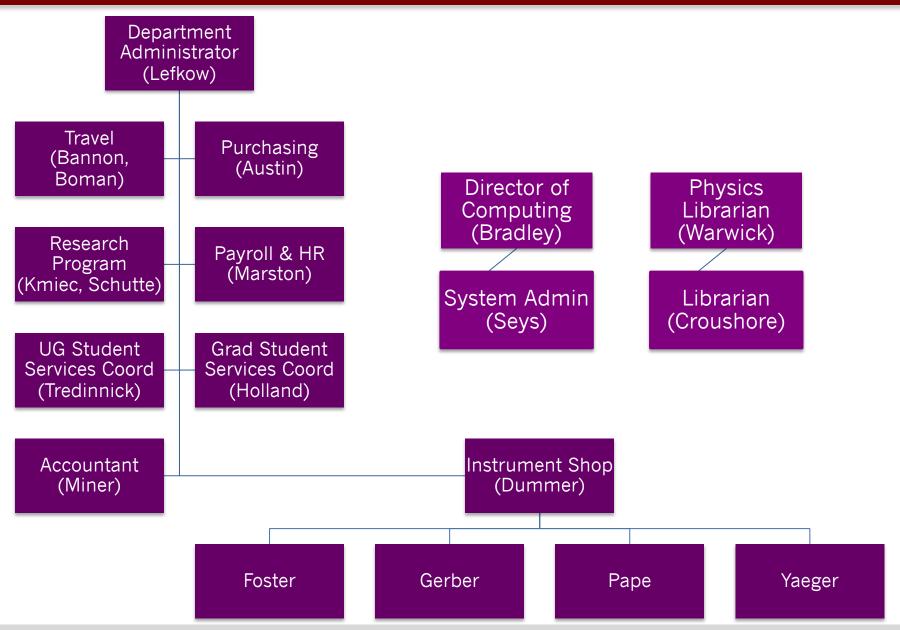
### **Physics Teaching Organization**





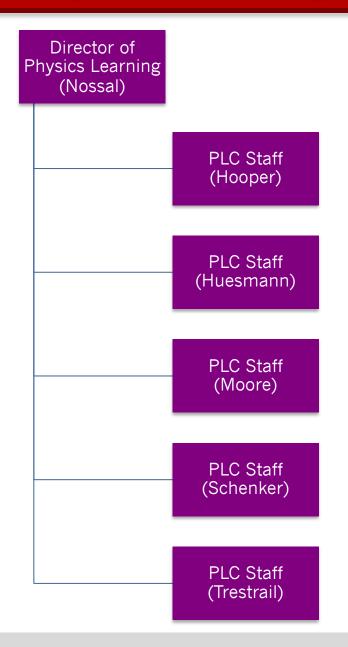
### **Physics Administration & Services**

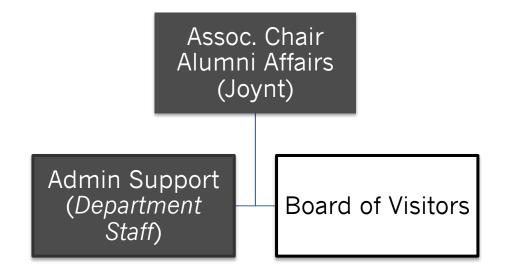




# Physics Learning & Physics Earning ©







This is very important effort which funds student scholarships, visiting speaker funds, outreach and lately new faculty!



# **College Financial Position (Good News!)**

- We are in a strong financial position
- Situation much different than 5 years ago
- Contributing factors
  - Revenue-generating (131/VISP) programs
  - Summer term
  - Philanthropy
  - Undergraduate enrollment expansion





August 27, 2019 L&S Plenary Meeting



# **Enrollment Expansion: Initial Plan**

- Increase undergraduate population by 250 per year for four years
- Grow out-of-state undergraduate population
- In the new steady state:
  - 1,000 more students in entering cohort
  - 4,000 more undergraduates
  - About 13% increase overall
- Significant revenue implications
  - Out-of-state tuition differential





August 27, 2019

L&S Plenary Meeting



# **Enrollment Expansion Benefits (2)**

- Fall salary exercises
  - Campus supplement for faculty raises
  - College supplement for staff raises
- TA rates
  - 9% increase for FY20
  - Cumulative 28% increase over past 3 years
- L&S minimum instructional rates
  - Increased by 15% or more for FY20





August 27, 2019

L&S Plenary Meeting



## **Departmental Spending Plans**

- Many departments have resources
  - New budget through summer reallocation exercise
  - 131 revenues, summer revenues, and accumulated balances
- Strategic planning needed before spending!
- Engage your budget and/or executive committee in planning
- Discuss plans with your divisional associate dean





August 27, 2019

L&S Plenary Meeting

# Faculty Hiring vis-à-vis Strategic Plan



#### Long term strategic plan, Top priority

- Experimental neutrino physics
  - Department welcomed Brian Rebel in 2018
- Atomic, Molecular, Optics (AMO) and quantum physics
  - Department welcomed Shimon Kolkowitz in 2017
- Theoretical cosmology and astrophysics

#### **Second priority**

- Condensed matter experiment and theory
- High energy particle experiments
  - Department welcomed Kevin Black and Tulika Bose in 2018

#### **Additional targets**

- Computational physics and high performance computing
- Biological physics, nonlinear physics & soft matter
- Exoplanets

#### **2018-19 hiring plan – continuing to 2019-20**

- Multidisciplinary cluster proposal for Quantum Computing
- Martin L Perl Endowed Professorship

# Strategic Plan Lite – 2019 Update



The Strategic Planning Committee of the Physics Department met on April 16, 2019 with Baha Balantekin, Victor Brar, Dan Chung, Cary Forest, and Sridhara Dasu present. Mark Saffman could not join, but sent his input. Prior to the meeting all the members of the committee carefully read previously submitted contributions from individuals or groups describing where their field is going and how a hire in their area is good for the department. After careful deliberations the Committee listed the proposed hires in two groups. The committee did not priority order within each group, the lists given below are alphabetical.

2019-20 Searches

Hires expected for the next one or two years (not a priority ordered list):

- Computational/Theoretical Cosmology
- Computational Plasma Theory
- Condensed Matter Experiment
- Particle Astrophysics Experiment (IceCube)
- Quantum Information Theory

Hires expected within two-to-four years (not a priority ordered list):

- Accelerator-based neutrino experiment
- AMO experiment
- Astrophysics experiment
- Plasma experiment



# **TOP Update**

#### Danielle Speller did not accept Nevertheless, we should try again

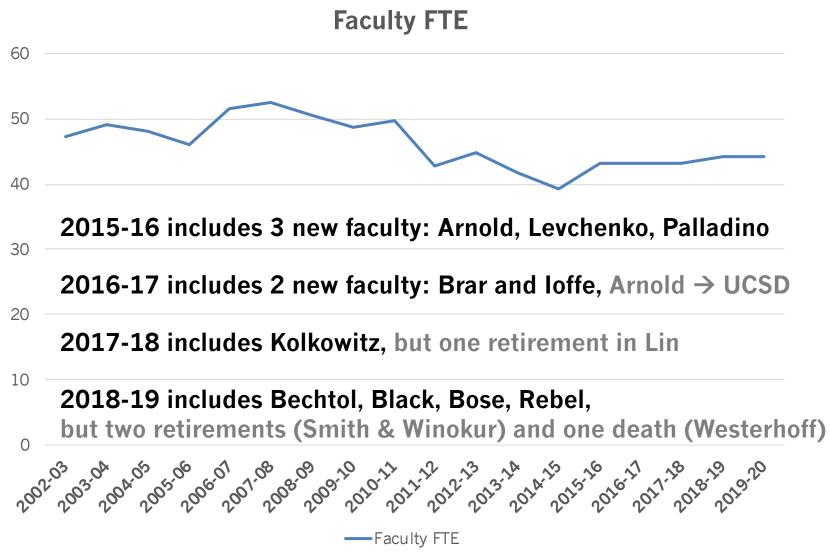
- L&S nominated 37 candidates; 17 offers were authorized:
  - · 6 acceptances, 6 declines
  - 2 cases in which the department voted not to make an offer
  - 3 cases still pending
- There will be another round of TOP hiring this year with somewhat modified rules and expectations
  - Instructions will be forthcoming from Bascom
  - Expect more clarity on the two different pathways for TOP hires
- What can you do?
  - Continue to seek out and identify candidates
    - Use your colloquia/seminars to bring in potential candidates
    - · Attend disciplinary meetings of diverse populations where applicable
    - · Build research relationships with minority-serving institutions
  - Be able to answer the questions:
    - · What is your overall diversity plan?
    - What is your approach to creating an environment that will retain the TOP hire?
    - What is your strategy for recruiting a diverse pool of candidates?"



August 27, 2019 L&S Plenary Meeting

# Size of Physics Faculty



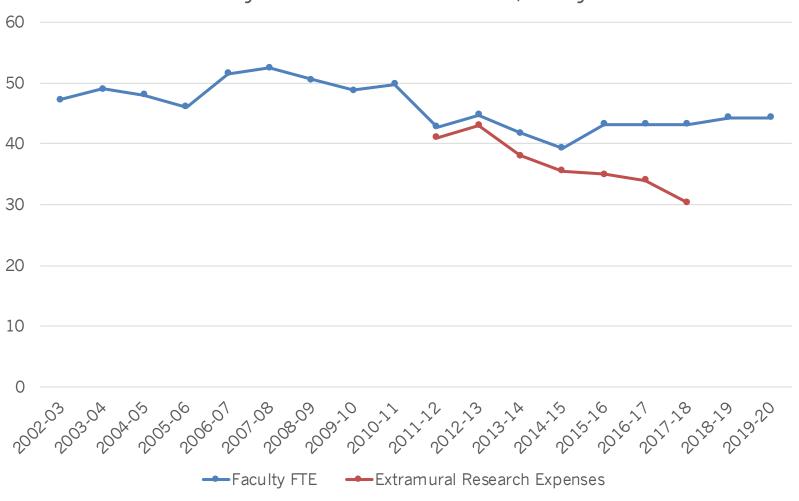


Note: Coppersmith & loffe are on long term leave

# Size of Physics Faculty vs Research Expenditures

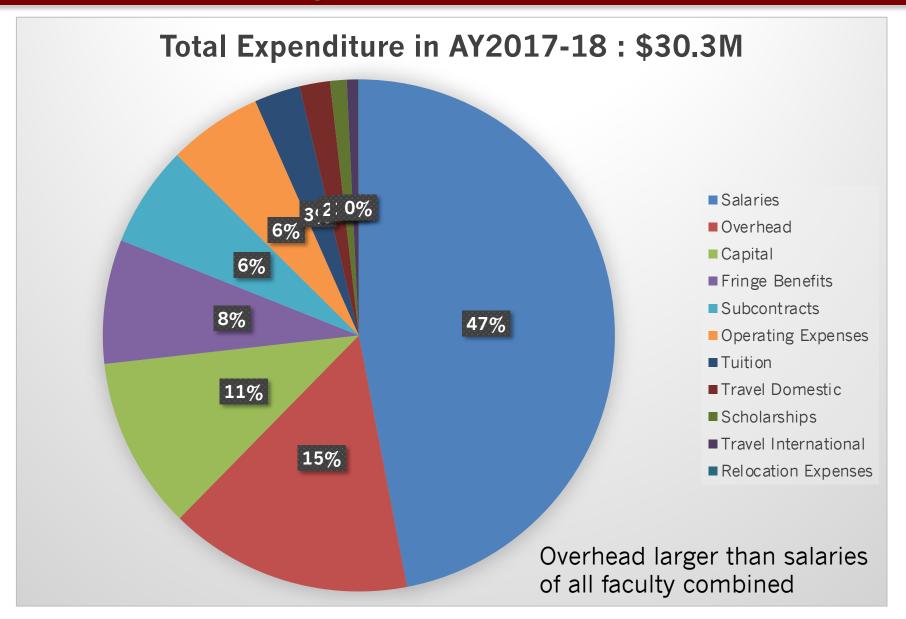


Faculty Count or Research M\$s vs year



# Expenditure Pie

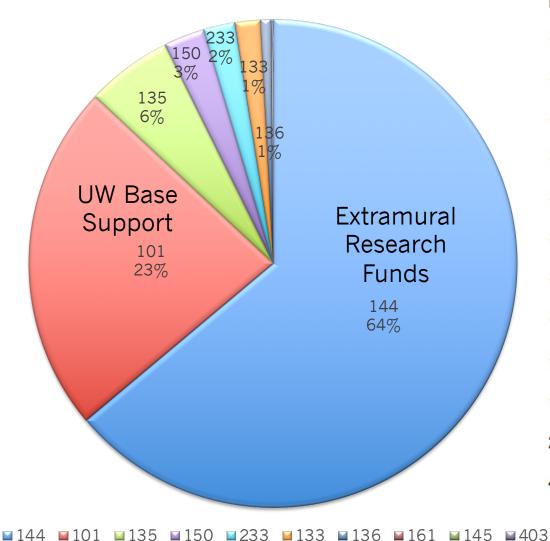




# Another Slice of Expenditure Pie







#### FUNDING SOURCES AND ASSOCIATED

- 101- State tax, Federal indirect cost, and
- 104- Funding from UW-Extension used for
- 128- Cost recovery funding used by units
- 131-Tuition generated by self-supporting
- 133- Non-Federal grants and contracts.
- 135-VCRGE(aka Grad School).
- 136- Cost recovery outreach funding med
- 144- Federal grants and contract funding.
- 150- Federal indirect cost reimbursement
- 161- University administered trust funds.
- 233- Gift funding.
- 402- Minority and disadvantaged program

# Funded Research Areas & Faculty



Astro-particle / Neutrino-astrophysics (WIPAC)

Halzen, Hanson, Karle, Vanderbroucke

Astrophysics & Cosmology (Cosmo)

McCammon, Timbie, Bechtol

AMO and Quantum Computing with Neutral Atoms (AMO)

Saffman, Walker, Yavuz, Lawler, Kolkowitz

Biophysics (Bio)

Gilbert

Condensed Matter, Quantum Computing & Nanostructure Experiment (CMP-E)

Brar, Erikkson, McDermott, Rzchowski

Condensed Matter, Quantum Computing Theory (CMP-T)

Coppersmith, Levchenko, Joynt, Vavilov, Ioffe

High Energy Physics Experiment (HEP-E)

Black, Bose, Dasu, Herndon, Palladino, Rebel, Wu

Nuclear, Particle, Astro-particle, Cosmology & String Theory (NPACS-T)

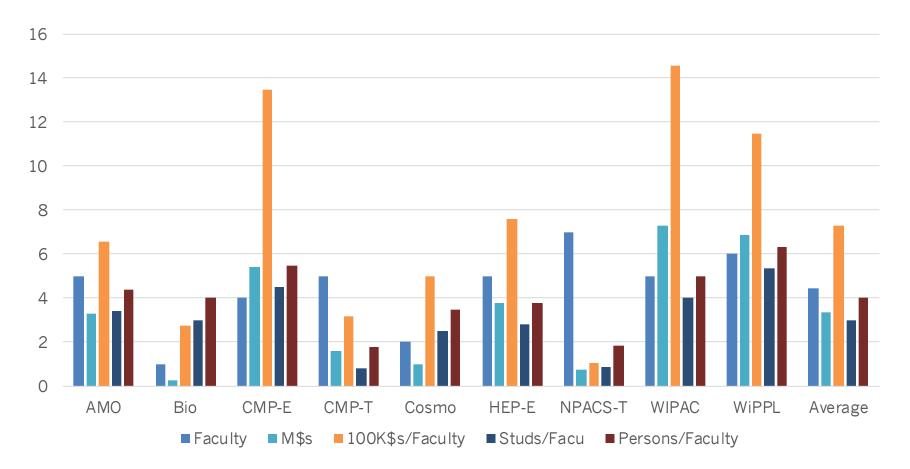
Bai, Balantekin, Barger, Chung, Everett, Hashimoto, Shiu

Wisconsin Plasma Physics Laboratory, Plasma-astrophysics (WiPPL)

Boldyrev, Egedal, Forest, Sarff, Terry, Zweibel

Broad groupings, trying to put one faculty in one group (not perfect!)

# Research Areas, Funding & People wisconsing wisconsing and the property of the



Reasonably well balanced across various research areas
As expected, experimentalists are better funded, and support more people
As expected, "centers" and "clusters" are better funded than remote/small groups

# Ray MacDonald Endowment Fund WUNISCONSIN

## **Intra Departmental Funding Opportunity**

"The purpose of this discretionary fund is to promote excellence in all areas of the UW physics department: research, teaching, and outreach. Awards will be decided via a yearly review of proposals from faculty and academic staff of the department."

Submit up to 2-page proposals

(https://www.physics.wisc.edu/auth/RayMacDonaldProposals)

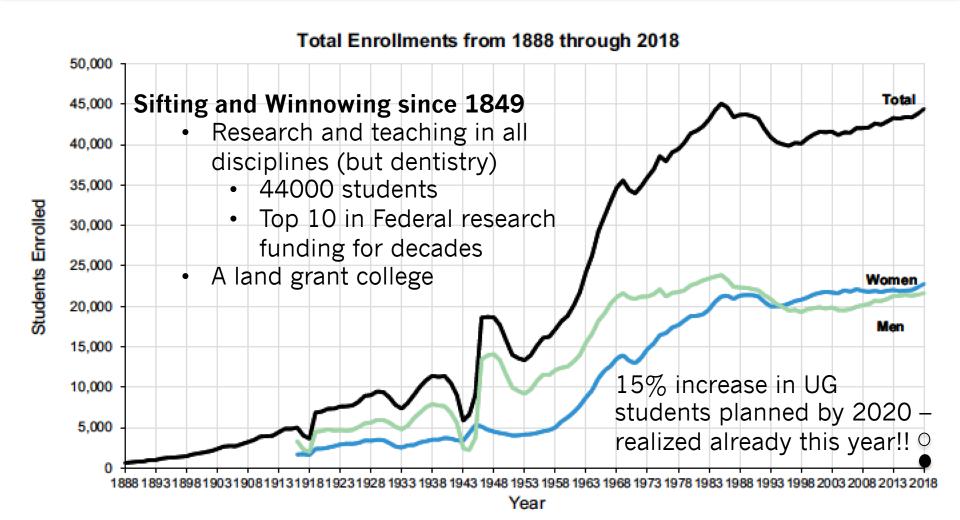
Deadline: October 6, 2019

Target budget: \$30 K per proposal

Top 2-3 proposals will be selected for funding by the **Alumni and Board of Visitors Committee** 

## Yet, tiny by UW-Madison Scale





ACADEMIC PLANNING & INSTITUTIONAL RESEARCH, OFFICE OF THE PROVOST • VICE CHANCELLOR FOR FINANCE & ADMINISTRATION

While general UG population is diverse, physics population is far from it.

## Service Course Enrollments



About 15% take Physics 103+104

About 10% take Physics 202, but 201 is split between physics and engineering

About 6% take Physics 207+208

30%

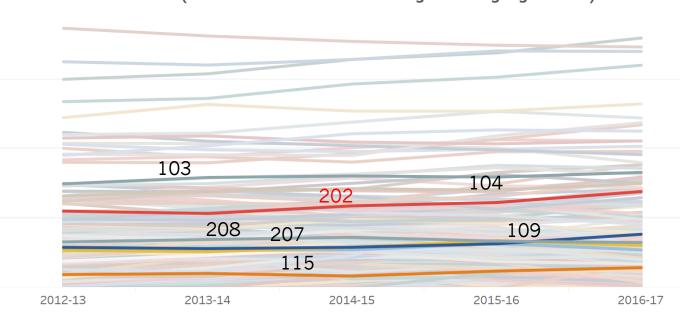
About 2% take Physics 115

So, about a third 10% of the UG class goes through 9% physics!

#### Most Frequent Courses for All Majors, by Academic Year of Graduation

Course (Listed under primary subject where applicable)	2012-13	2013-14	2014-15	2015-16	2016-17
ZOOLOGY 151	14%	14%	15%	16%	15%
PHYSICS 103	15%	16%	16%	16%	17%
MUSIC 113	12%	12%	12%	15%	18%
COMMUNICATION ARTS 100	13%	14%	16%	15%	14%
COMPUTER SCIENCES 302	10%	11%	13%	14%	16%
PHYSICS 104	13%	14%	14%	14%	15%
MARKETING 300	15%	14%	14%	14%	16%
STATISTICS 371	10%	11%	12%	13%	14%
ACCOUNTING AND INFO SYSTEMS 100	13%	13%	12%	13%	15%
ZOOLOGY 102	13%	13%	13%	13%	12%

#### Course Trends (Click a Course in the Table or Legend to Highlight Trend)



# Physics Undergraduate Students

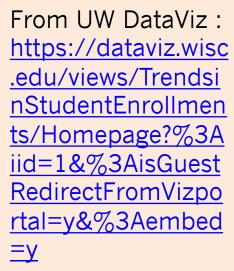


## Headcounts of Degree-Seeking Students



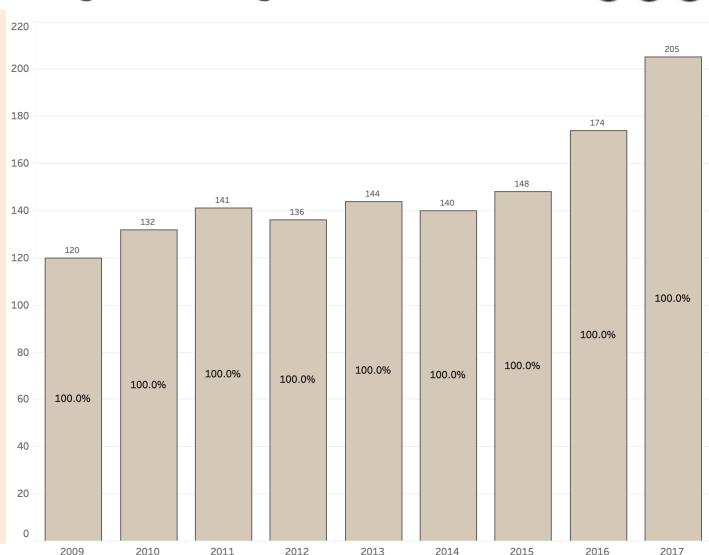






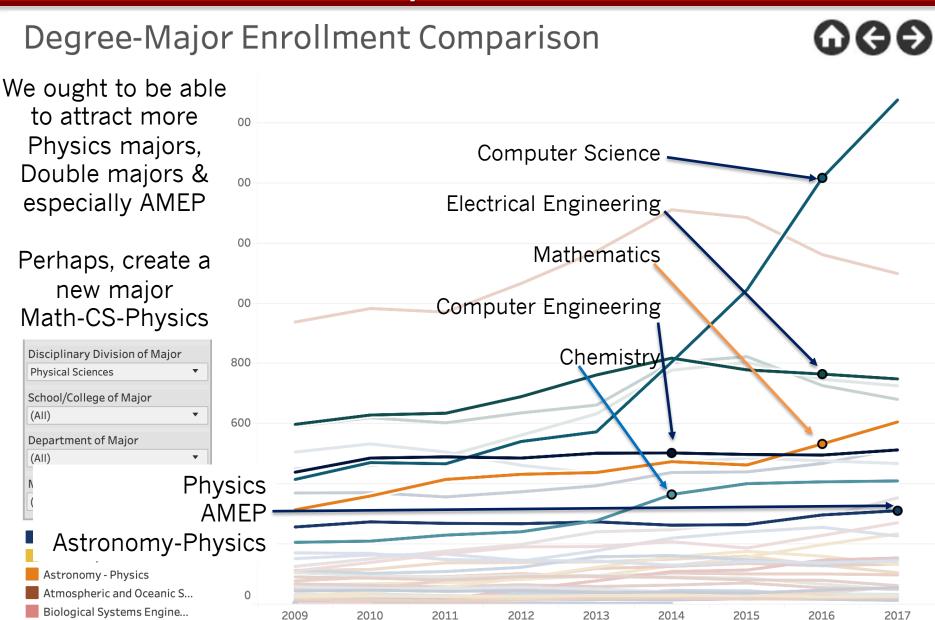
My selection includes all Undergrad Majors in the programs:

Physics Astronomy-Physics AMEP



## **UG Peer Departments**



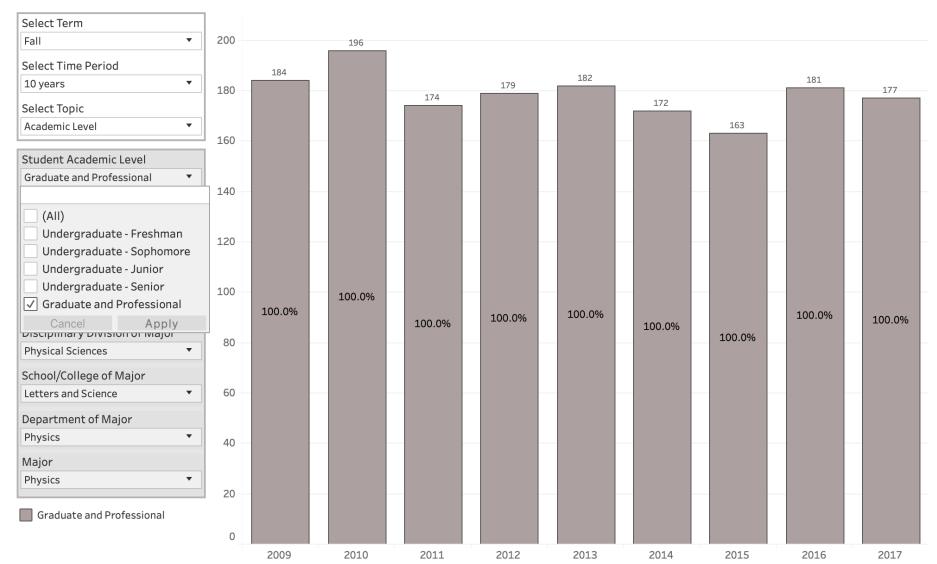


## **Graduate Students**



## Headcounts of Degree-Seeking Students

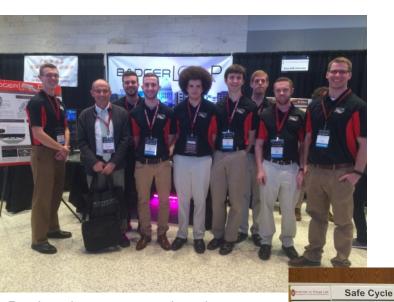




## Involving Young Minds in Research ...



# Research opportunities for undergraduates



Badgerloop team develops maglev technology and wins 3<sup>rd</sup> place in the SpaceX Hyperloop competition featured on international news



# ... Training Next Gen of Scientists





## From Vice Chancellor for Research WWISCONSIN



## Success across divisions

More than \$1B annual investment

New centers in growing fields (data, genomics)

IceCube upgrade \$37M

Cluster hires

Faculty support (Artist in Residence, data security/storage)

## WARF Investments

\$76.5M annual gift all university & affiliates New competitions (Library Collections, Core Enhancements) 7<sup>th</sup> greatest source U.S. patents (157 in 2018 for UW inventions)

## Graduate School

Over 9,200 master's and doctoral students Improvements/efficiencies in admissions processing

About \$463,000 in travel awards

Six consecutive years of stipend increases

New services for graduate students facing academic/personal issues Support for students from underrepresented or marginalized identities

8/28/2019

# Stress & Anxiety (3)





## Increasing Support for Mental Health

- Students struggling more with stress, anxiety, and depression
- Mental Health Task Force submitted report in May
- UHS has added 10 new positions for this fall
- Extended evening hours
- Appointments always available for students in crisis
- Support for underrepresented students 4 staff providing services in Mandarin or Spanish
- Increasing wellbeing support for students including new peer coaching model
- Available for consultations and resources



#### **Prohibited Conduct**

- ▶ UW Madison Policy on Sexual Harassment and Sexual Violence (2018) prohibits:
  - ▶ Sex Discrimination
  - ► Sexual Harassment
  - ► Sexual Assault
  - ▶ Dating Violence & Domestic Violence
  - ▶ Stalking
  - ▶ Retaliation

UNIVERSITY OF WISCONSIN 8/26/2019



## **UW Ombuds Office**



- 5 emeriti faculty, academic staff, and university staff hired 25% time for (staggered) 3-year terms.
  - Collectively, we have over 150 years of UW-Madison experience.
- Each Ombuds is "on call" for 1 of every 5 weeks and handles all the new requests coming in that week.
  - Returning "visitors" maintain contact with the same Ombuds unless they request a change.
- We serve faculty, academic staff, university staff, post-docs, and graduate (and undergraduate) student employees of the University
- Visitors can contact us through our Ombuds email or our Ombuds phone.
- The Ombuds work collectively and frequently seek advice from one another.





# Ombuds.....We Listen

Unprofessional Mistreatment Fairness
Confidential Facilitate Harassment Confusion
Career advancement Conflict Opportunities
Workplace OMBUDS Bullying
Challenges OMBUDS Listen
Strategies Climate Communication Disrespect
Early consultation Unfair

Contact us: 608-265-9992 uwombuds@mailplus.wisc.edu

## Physics Graduate Student Council:



# Constructed & Run by Physics Grad Students (pgsc.physics.wisc.edu)

#### **Mission:**

To improve the well-being and success of graduate students in the department.

#### Specifically:

- Facilitate communication with the department and advocate on behalf of the graduate students,
- Assist the department in welcoming new students and recruiting prospective students,
- Promote social cohesion among graduate students, and
- Provide resources to help prepare students for post-graduate careers.

## **PGSC**



#### **Physics Graduate Student Council Organizational Chart**

**President** Susan

Sorensen

**Vice President** Kayla Leonard

All officers can be found on **PGSC** website: pgsc.physics.wisc.edu

#### **Committee Chairs**

**Recruit &** Welcome

Megan Tabbutt

**Professional Development** 

Rob Morgan

**Peer Mentoring Brent Mode** 

**Social Activities** Trevor Oxholm & Urvashi Gupta

#### **Advocacy Team**

1st Year Rep TBD

2nd/3rd Year Rep Ben Harpt

4th/5th+ Year Rep Leslie Taylor

**International** Rep: Leah Tom

## **PGSC**



# **Physics Graduate Student Council Organizational Chart**



1st Year Rep TBD

Rep Ben Harpt

Rep Leslie Taylor

Rep: Leah Tom

## PGSC: Last Year



#### **Communication / Advocacy**

- Students on Department Committees
  - Climate & Diversity
  - Graduate Program (advised on minor requirements and faculty mentoring)
- First year study sessions

#### **Recruit & Welcome**

- Q&A Panels during First-Year Orientation
- Meals with current grad students during



#### **Social Cohesion**



Cookie Time

Pizza Nights

Ping pong tournamer

Pi day bake-off



nvited speaker seminars

Rock Crystal Mackie Bailey



## PGSC: New/Upcoming This Year

**Peer Mentoring** 

Designed to work in

tandem with faculty

mentoring



#### **Communication / Advocacy**

- Climate Survey
- International Student Nights

#### **Social Cohesion**

- Fall Welcome Picnic!
  - 6PM today
  - James Madison Park
  - O All grad students invited (including MSPQC)
- Grad lounge remodel

#### **Recruit & Welcome**

 PGSC-hosted lunch & evening activities during orientation

Congrats to Team Heisenbergers for placing 2nd at League Trivia last week!

#### **Professional Development**

- Bi-weekly workshops (Starting September 19th)
- Resources and info here: https://rmorgan10.github.io/UWMadisonPGSC-PD/

## Questions? Comments? Get involved?



#### pgsc.physics.wisc.edu

(comment box, officer list, signup forms)

#### <u>Grads</u>

Get involved! Join a committee!

**Recruit & Welcome** - Help out with prospective student weekend and orientation

**Social Activities** - Brainstorm, organize, or help run events like the picnic

**Professional Development** - Assemble resources and events to help students prepare for future jobs

**Peer Mentoring** - Help make sure peer mentoring gets off to a great start

#### <u>Faculty</u>

Alumni reaching out wanting to mentor or support students? Get in touch with Susan or an appropriate PGSC chair.

Want graduate student input on a committee? We're happy to help.

Curious about other ways to help here and there? Let's talk.

## **Director of Communications**



## Dr. Sarah Perdue





**Press releases** 

**Physics and WQI websites** 

news.wisc.edu

Newsletter



Mostly organizational/managing role for now

# What does Sarah do?

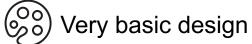


WQI website

Adding news to Physics site +

screens





Department tablecloth, banner, lanyards,

etc.

Ad design (e.g. MSPQC)

**Photography** 

**How to follow UW brand guidelines** 



## Communications



#### Social Media

Provide me with photos from your research

Let me know when you're presenting at a conference

I can help with lab/individual #scicomm



#### News + stories

**Exciting new studies?** 

Awards/honors?

Any fun/exciting/intriguing personal stories about you as a scientist?

Is there a news story about someone in the department that needs to go on our site?

# What can Sarah and we do together?



#### Outreach

**Wonders of Physics** 

Outreach events on campus

**STEM conferences** 

**Activity development** 



#### Web content

Basic Wordpress site layout and content

Adhering to web accessibility guidelines





#### "External" media

When should news be pushed to higher levels? e.g. L&S, UComm, external media

Commentary on "physics in the news" Profiles in Experts Databases



### Outreach

HOME / ANNUAL SHOWS

"Never has there been a time when an understanding of science has been more important to the well-being of individuals and to the nation than the present"

-CLINT SPROTT - FOUNDER, PROFESSOR EMERITUS

#### **ANNUAL SHOWS**

Scheduled presentations of **The Wonders of Physics** and a <u>Physics Fair</u> are given on the UW-

Madison campus for the general public in mid-February each year. Free tickets are

recommended and are available after January 1st using the On-Line Ticket Form. Alternately,

you may call (608) 262-2927 or e-mail <u>wonders@physics.wisc.edu</u>. The next public presentations of **The Wonders of Physics** are scheduled as follows:

Saturday February 8, 2020 1, 4, and 7 pm

Sunday February 9, 2020 1 and 4 pm

Saturday February 15, 2020 1, 4, and 7 pm

Sunday February 16, 2020 1 and 4 pm



These presentations will be held in 2103 Chamberlin Hall, <u>1150 University Avenue</u>, <u>Madison</u>, <u>WI</u>. The presentations last a bit over an hour and are suitable for all ages.

# **Enjoy the Reception!**

