

The Physics Observer

May 6, 2022

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UPCOMING EVENTS

Monday, May 9, 2022 - 4:00pm, PAA A-102:
[Physics Colloquia: The Piezoaxionic Effect](#)
Asimina Arvanitaki,
Perimeter

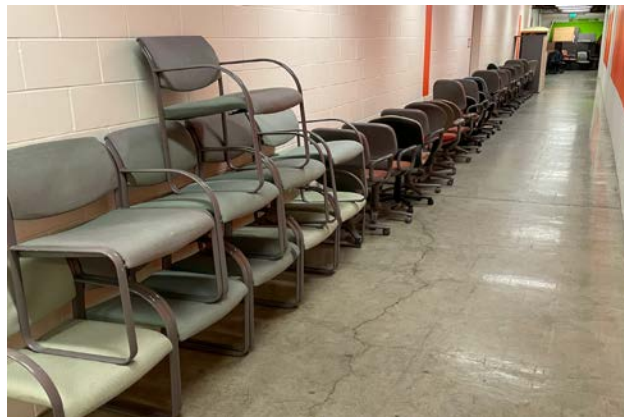
Monday, May 16, 2022 - 3:00 pm, *RSVP ONLY*:
[2022 Physics Awards Ceremony](#), Kai-Mei Fu, Aurel Bulgac, Xiaodong

Welcome

The Physics Observer is a periodic bulletin of happenings in and around UW Physics. Our goal is to share information on notable happenings, events, and news associated with the department. Please feel free to pass this newsletter to anyone who may be interested. Readers wishing to subscribe, or unsubscribe, may do so [here](#). Previous newsletters are on the physics website at [The Physics Observer Newsletter](#). Information for future editions may be sent to the editor, Alexis Hall.

Chair's Corner (L. Yaffe)

The Physics/Astronomy Building was completed in 1994, almost 30 years ago. Most of its furnishings date from the initial construction. For carpeting and office chairs, this is far past any reasonable notion of their useful lifetime. Although more remains to be done, this year has seen much progress on updating furnishings. New carpet has been installed on the first, second and most of the fifth floor. And just recently 130 new desk and side chairs for offices were delivered. The picture below shows a small portion of all the old chairs awaiting transport to UW Surplus.



The Lillian Christie McDermott Term Memorial Fund has recently been established with generous donations from Lillian's children: Melanie, Constance and Bruce. This fund will provide support for our physics education group and, specifically, the resumption in summer 2023 of a recurring summer program for in-service teachers. Further donations to support this effort are, of course, most welcome; please see [the memorial giving page](#).

Finally, we have had another highly successful season of new faculty recruitment. Joining our faculty in 2023 will be three new assistant professors working in quantum field theory, quantum gravity, and elementary particle theory: Isabel Garcia Garcia, Justin Kaidi, and G. Joaquin Turiaci.

Xu, Boris Blinov

Tuesday, May 17, 2022 -

3:30pm, PAT C-520:

Physics Department:

General Exam, Ryan

Lanzetta (Advisor:

Lukasz Fidkowski),

University of

Washington

Thursday, May 19, 2022

- 7:30 pm, Kane Hall

130, RSVP ONLY:

Frontiers of Physics

Lecture Series: Generating

High-Intensity, Ultrashort

Optical Pulses

Dr. Donna Strickland

(2018 Nobel Laureate in

Physics), University of

Waterloo

Monday, May 23, 2022 -

4:00pm, PAA A-102:

Physics Colloquia:

Cooking, Fishing and

Jogging through Phase

Space: A Practical Guide

to Discovering and

Understanding New

Materials, Paul Canfield,

Iowa State University

Friday, May 27, 2022 -

10:30am, PAT C-520:

Physics Department:

General Exam, Elliott

Runburg (Advisor: David

Cobden), University of

Washington

Friday, May 27, 2022 -

1:00pm, PAB B421:

Physics Department: Final

Exam: Tuning

Superconductivity in an

Iron-based Superconductor

with Uniaxial Stress

Paul Malinowski (Advisor:

Jiun-Haw Chu), University

of Washington

Milestones & Arrivals

- ★ Academic Counselor Paula Newcomer celebrates about 10 years with the University of Washington

Learn about our incoming Assistant Professors:

- ★ Dr. Isabel Garcia Garcia, Santa Barbara, KITP:
<https://inspirehep.net/authors/1068164>.
- ★ Dr. Justin Kaidi, Stony Brook U., New York, SCGP:
<https://sites.google.com/scgp.stonybrook.edu/jkaidi/>.
- ★ Dr. Gustavo Joaquin Turiaci, Princeton, Inst. Advanced Study:
<https://www.ias.edu/scholars/gustavo-joaquin-turiaci>.

Research Awards & Honors

- ❖ International Undergraduate student, Erik Solhaug, was recognized as one of the Husky 100, UW undergraduate and graduate student leaders who are making the most of their time at the UW.
- ❖ Professor Subhadeep Gupta received \$138K from the Air Force Office of Scientific Research for Many-body Dynamics of Quantum Gases in Time-Varying Optical Lattices.
- ❖ Director of CENPA and Professor David Hertzog
 - received \$2M from the US Department of Energy for Experimental Nuclear Physics and
 - was awarded the 2022 University Faculty Lecture Award.
- ❖ Associate Professor Gray Rybka received \$139K from the US Department of Energy for ADMX G2 1K Pot Plumbing Upgrade and Operations.
- ❖ Professor Xiaodong Xu
 - received \$87K from the US Army Research Office for Ab-Initio Solid-State Quantum Materials: Design, Production, and Characterization at the Atomic Scale, and
 - received \$8,500 from the Office of the Director of National Intelligence for Ultrafast Control of 2D Magnetism for Multifunctional Devices.

Department Resources & News

Attend a community conversation on the Title IX Report: Members of the UW community are invited to attend a brief presentation, and ask questions about the first Title IX Annual Report. There will also be an opportunity to share observations following their review of the report. Attend a session on **May 11** or **May 19**.

The 25th Annual Undergraduate Research Symposium will take place on **Friday, May 20, 2022**. 9:30 a.m. Virtual presentations begin, at 11:00 a.m. In-person welcome in Mary Gates Hall. Registration recommended. Free and open to the public.

UW Fitness Day 2022 is returning in person on **May 23!** Enjoy the company of your colleagues while getting in a great workout led by UW Athletics coaches, UW Recreation instructors, and community partners. UW Fitness Day is a one-of-a-kind, campus-wide event to celebrate movement.

UWHR and ISC websites are now available in 11 languages: UW Human Resources and the Integrated Service Center are jointly piloting functionality that translates most web content into 11 of the most common languages spoken by UW employees.

Friday, June 3, 2022 -
12:00 pm, Mark
McDermott Plaza:
Physics Spring BBQ

Saturday, June 11, 2022
- 9:00 am, Physics-
Astronomy Auditorium:
[Physics Graduation
Celebration!](#)
Department of Physics
2021-22 Graduating
Class and Department
Members

June 11, 2022 - 1:30pm
Husky Stadium:
[Other Events: University
of Washington
Commencement](#) University
of Washington
Administration and Guests

July 14-16, 2022 - 8:00 am:
[Physics Department:
Summitting the Unknown:
New Physics, Celebrating
the Legacy of Ann Nelson](#)

July 20, 2022 - 7:30pm,
Kane Hall 130:
[Frontiers of Physics: The
Surprising Expansion
History of the Universe,](#)
Adam Riess (2011 Nobel
Laureate in Physics), Johns
Hopkins University and the
Space Telescope Science
Institute

[SOCIAL MEDIA](#)

[Instagram](#)

[Facebook](#)

[YouTube](#)

[Twitter \(@physicsuw\)](#)

[Free UW department meeting spaces in the HUB:](#) UW departments are eligible for one free meeting per week, for two hours or less, in small meeting rooms, or a 50% discount on medium meeting rooms.

[Personalized total compensation statements coming soon!](#) Your annual statement will demonstrate the breadth and total value of your employee pay and benefits package.

[Celebrate Asian & Asian American and Native Hawaiian & Pacific Islander Month:](#)

- ★ Learn how you can support Asian, Asian American, Native Hawaiian and Pacific Islander communities with resources from the [UW Combined Fund Drive](#).
- ★ Learn about [AA and NHPI Physicists](#) updated weekly.
- ★ Check out [APS: In Their Own Words, Stories of Targets of Investigation:](#) The Stories of Xiaoxing Xi, Anming Hu, and Gang Chen

[Accelerate your research at the UW:](#) Find up-to-date tools capable of handling your research needs, tap the power of the UW's own supercomputer, and get a one-on-one consultation about your computing needs.

[Instructors share what they discovered from more than a year of remote teaching:](#)

Here four **UW Engineering instructors** share what they learned from more than a year of remote teaching, and what they have been integrating into their classes back on campus.

[Assorted Talks & Meetings](#)

May 17, 2:30–3:30 p.m. [Braiding Indigenous knowledge into STEM undergraduate curriculum and practices: An ally's perspective.](#) In this Zoom talk, Dr. Ashely Welsh (University of British Columbia) will explore various approaches for STEM educators to begin and sustain their efforts to Indigenize their curricula and pedagogy. The literature, current programs and models for faculty development will guide her presentation; her personal and professional experiences as a non-Indigenous STEM educator; and the generosity and care afforded to her by her Indigenous and non-Indigenous colleagues and mentors. Register [here](#).

Thursday, May 19, 2022, at 7:30 pm, the [Frontiers of Physics Lecture Series](#) welcomes **[Dr. Donna Strickland, 2018 Nobel Laureate in Physics](#)** from the University of Waterloo. The topic is [Generating High-Intensity, Ultrashort Optical Pulses](#).

June 15-July 8, 2022, Rensselaer Polytechnic, Troy NY. [Cyberinfrastructure Training for Modeling Physical Systems:](#) Online boot camp and summer school for advanced undergraduates and graduate students. Application **deadline is May 15, 2022.**

August 4-5, 2022, Washington DC, [Advancing Graduate Leadership conference, sponsored by the APS, for women and gender minority graduate students and postdocs:](#) The in-person AGL Conference will feature professional development training, networking, and a celebration of women and gender minorities' roles in exploring cutting edge science and in shaping our disciplinary culture. Facilitators will include physicists from academia, industry, national laboratories, and non-profit organizations, bringing a diverse range of personal and professional backgrounds allowing participants to draw from a variety of experiences. Application **deadline May 30, 2022.**

Applications open for the **annual Wolfram summer school, July 3-22, 2022** in Champaign, Illinois, US, at the Wolfram Research Inc. headquarters. Space is limited; early applicants have a higher chance of acceptance. Apply [here](#).

Funding Announcements

Pre-proposals solicited for new [NSF Physics Frontiers Centers](#). **Internal UW deadline: June 8, 2022.**

Nominations are solicited for the [Micius Quantum Prize 2022](#), recognizing contributions to quantum technologies. ~ \$150K. **Deadline June 30, 2022.**

Submissions solicited for [Springer Thesis Awards](#): The Springer Theses series brings together a selection of the best Ph.D. theses from around the world and across the physical sciences. \$500 awarded for selected outstanding PhD theses. **Deadline is June 30, 2022.**

Job Opportunities

- [Distinguished Postdoctoral Fellowships, Army Research Lab](#): These fellowships allow recipients to pursue independent research of their choosing that supports the mission of ARL. The application **deadline is June 15, 2022.**
- [Faculty positions at all levels](#), Ahmedabad University.

Selected Publications

- "On the associativity of one-loop corrections to the celestial OPE", N. Paquette, et al., <https://arxiv.org/abs/2204.05301>.
- "Search for 70 μeV Dark Photon Dark Matter with a Dielectrically-Loaded Multi-Wavelength Microwave Cavity", R. Cervantes, C. Hanretty, S. Kimes, G. Leum, P. Mohapatra, R. Ottens, Y. Park, G. Rybka, J. Sinnis, J. Yang, et al., <https://arxiv.org/abs/2204.03818>.
- "TASI Lectures on the Mathematics of String Dualities", N. Garner and N. Paquette, <https://arxiv.org/abs/2204.01914>.
- "New Horizons: Scalar and Vector Ultralight Dark Matter," Snowmass white paper, C. Bartram, M. Baryakhtar, J. Gundlach, M. Guzzetti, et al., <https://arxiv.org/abs/2203.14915>.

UW Coronavirus Response Information

[University of Washington COVID-19 case and vaccination tracking dashboard](#): COVID-19 case counts are based on cases reported to the UW Environmental Health & Safety Department (EH&S), including results from the Husky Coronavirus Testing program, which are updated every weekday.

Getting vaccinated and boosted remains your best way to avoid serious illness. If you do have symptoms of a respiratory infection, do not go to work or class or socialize with others. Allergies are common this time of year, so pay extra attention to any new or a change in symptoms; get tested if your symptoms are new or seem different from usual.

Contact tracing indicates that the vast majority of positive cases reported to the University are due to off-campus social gatherings and events, or are a result of roommates or family members passing the virus to someone else in their household. If you are planning to attend or host a social gathering, [taking a coronavirus test beforehand](#) — particularly a rapid test immediately before the gathering — is a good way to reduce the risk of unknowingly spreading it to others. If you are hosting a social event, encourage attendees to test beforehand.

If you do test positive, please report it to [UW Environmental Health & Safety](#) to help reduce transmission to others. The Husky Coronavirus Testing voluntary research study

has also increased the number of invitations for community tests it has sent out to individuals with no symptoms, focusing on students living in residence halls.

Masks are now strongly recommended: The majority of University community members have been wearing masks this quarter and even though cases at the University are declining, due to increases in our region, the University now strongly recommends wearing a well-fitted, high-quality mask indoors (e.g., KN95, N95, KF94 and surgical masks) to further reduce the potential for transmission.