



The Physics Observer

Mar 8, 2022

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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 may be found on the physics website at [The Physics Observer Newsletter](#). Information for future editions that may be sent to the editor, Alexis Hall.

Chair's Corner (L. Yaffe)

This newsletter normally focuses on events within the Physics department or directly affecting department members. Generally positive news. But as I read and watch the terrible reports coming out of Ukraine, I am unable to craft much of an upbeat department-focused missive. It is true that the Covid situation has greatly improved in our area, and several faculty have received well-deserved awards (see below). That's good news, but on the global scale, it seems clear that the future has gotten darker. Of course, instances of barbaric behavior litter human history, even through modern times and in recent years. The latest horrors are merely unfolding with unprecedented speed and visibility.

As a physicist, I do believe that efforts to understand the nature of the universe have intrinsic value. And the progress of physics, and of science more generally, is truly amazing. If only we humans could make more progress in learning how to live with each other...

Milestones & Arrivals

- ★ Welcome [Jeanny Mai](#), the new Undergraduate Program Advisor, who joined the Physics Department last month.

UPCOMING

EVENTS

Thursday, March 10, 2022

- 2:00 pm, Zoom:

Physics Department:

General Exam

Kevin John Cutler (Chair:
Paul Wiggins), University of
Washington

Monday, March 14, 2022,

3:30 pm, H-Bar:

Climate & Diversity Event:
Pi Day Celebration

Thursday, April 28, 2022

- 11:00 am, CENPA

Conference Room:

Physics Department:

General Exam

Joshua Labounty

(Advisor: David Hertzog),
University of Washington

Monday, May 16, 2022 -

3:00 pm to 5:00 pm,

Vista Cafe:

2022 Physics Awards

Thursday, May 19, 2022

- 7:30 pm, Kane Hall

130:

Frontiers of Physics

Lecture Series: Generating

High-Intensity, Ultrashort

Optical Pulses

Dr. Donna Strickland

(2018 Nobel Laureate in
Physics), University of
Waterloo

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

Research Awards & Honors

- ❖ Professor Xiaodong Xu received 240K from the Air Force Office of Scientific Research for Chern Number Engineering in Layered Topological Magnet.
- ❖ Professor Paula Heron has received the 2022 Homer L. Dodge Citation for distinguished service to the American Association of Physics Teachers (AAPT). The award, named in recognition of AAPT founder Homer L. Dodge, is presented to members in recognition of their exceptional contributions to the association at the national, sectional, or local level.
- ❖ Assistant Professor Matthew Yankowitz has been awarded a 2022 Young Scientist Award from the International Union of Pure and Applied Physics (IUPAP) for "his transformative contributions to the field of moiré quantum materials including pressure-tuning of superconductivity in twisted bilayer graphene."

Department Resources & News

March is Women's History Month. Start off the month with the following resources:

→ [Read AIP's Women's History Month Initiative](#)

→ [Read about Physics Women in History \(more posts to come\)](#)

Title IX course rolling out to existing employees: Husky Prevention & Response is a new online course on preventing and responding to sex- and gender-based violence and harassment. Physics employees will need to complete it by mid-April. New UW employees must complete the course within 30 days of their hire date.

A subcommittee of the UW Physics Climate & Diversity Committee is developing a new mentoring program to support physics undergraduates (UGs) and build a stronger community. The goal is to provide support for all students interested in or already admitted to UW Physics. We are planning to run a pilot program in Spring 2022, to be continued and expanded next Autumn. We are requesting volunteers to be MENTORS. More details of the program, as well as a list of the expectations for mentors, are provided in the introduction to this [application form](#). If interested, please fill out this application by the end of finals week, March 20th. Queries may be directed to Aaron Miller (UG, primary contact, ahmiller@uw.edu), Colin Weller (UG, cwelle@uw.edu), Akanksha Mishra (UG, mishra5@uw.edu), Tharindu W. Fernando (Graduate, tharindu@uw.edu), or Steve Sharpe (Faculty, srsharpe@uw.edu).

As announced in January 2022, Catalyst WebQ Survey will retire **Thursday, June 16, 2022**. Data will be available from the **archive starting Monday, June 27, 2022**, and **remain available until July 2024**. [UW Microsoft Forms](#) (part of UW Office 365) and [UW Google Forms](#) are both supported by UW-IT. With these tools, you can create and send surveys, including truly anonymous one, view survey responses in data-friendly formats, and secure surveys by making them accessible only to users with UW NetIDs.

Assorted Talks & Meetings

No registration needed to attend the [Nobel session on the Physics of Climate Change and Complex Systems](#) at the APS March meeting, **4:00-6:15pm March 13, 2022**.

Registration open for the [APS April meeting](#), "Quarks to Cosmos", **April 9-12, 2022**, NYC.

Launch event of the [UW AI Institute in Dynamic Systems](#), March 16-17, RSVP by **March 9th, 2022**.

Funding Announcements

July 14-16, 2022 - 8:00 am:

Physics Department:
Summitting the Unknown:
New Physics, Celebrating
the Legacy of Ann Nelson

SOCIAL MEDIA

[Instagram](#)

[Facebook](#)

[YouTube](#)

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

[Pinterest](#)

\$25 e-gift card for faculty volunteers participating in the **STEM Faculty Experiences with Work and Relationships survey**, find the survey [here](#).

Applications open for **APS Innovation Fund awards**, up to 200K. Pre-proposals are due **March 21, 2022**.

Applications open for **UW Global Innovation awards**. Research (up to 20K), faculty fellows (3K), and teaching and curriculum awards (up to 2K). Deadline **March 31, 2022**.

Applications open for **NRC research associateship programs** at multiple national labs, for both postdocs and senior researchers. Deadline **May 1, 2022**.

Applications open for **DOE Office of Science Graduate Student Research (SCGSR)** awards, for research conducted at a national lab. Deadline **May 4, 2022**.

Job Opportunities

- **Lecturers in Physics**, Texas A&M.
- **Associate Professor in Physics** Rutgers The State University of New Jersey Department of Physics.
- **Senior Lecturer in Physics** Vanderbilt University Department of Physics and Astronomy.
- **Assistant Professors in experimental physics**, UC Riverside:
<https://aprecruit.ucr.edu/JPF01536> and <https://aprecruit.ucr.edu/JPF01526>.

Selected Publications

- Universal transport in periodically driven systems without long-lived quasiparticles, M. Rudner, et al., <https://arxiv.org/abs/2203.01313>.
- Feedback Lock-in: A versatile multi-terminal measurement system for electrical transport devices, A. Barnard, H. Hiller, et al., <https://arxiv.org/abs/2202.11830>.
- Hydrodynamic electron transport in graphene Hall bar devices, A. Andreev, et al., <https://arxiv.org/abs/2202.10472>.
- Imaginary reflections and discrete symmetries in the heterotic Monster, N. Paquette, et al., <https://arxiv.org/abs/2202.09720>.
- Imaging dynamic exciton interactions and coupling in transition metal dichalcogenides, W. Holtzmann, P. Rivera, X. Xu, et al., <https://arxiv.org/abs/2202.09089>.
- Negative critical currents in single-channel Josephson junctions, T. Liu, A. Andreev, B. Spivak, et al., <https://arxiv.org/abs/2202.08039>.
- Toward the discovery of matter creation with neutrinoless double-beta decay, J. Detwiler, et al., <https://arxiv.org/abs/2202.01787>.

UW Coronavirus Response Information (from the Office of the President)

Changes to UW mask policies:

Following changes to state and local health policies, **masks will become optional inside most University facilities starting March 28**, the first day of the spring quarter. Masks will continue to be required in clinical and other healthcare settings and on public transportation, including UW shuttles. The UW Face Covering Policy will be updated to outline these specific settings. Please note that mask and testing policies for unvaccinated students and personnel are still under review and will be communicated prior to March 28. Additionally, UW locations and facilities not specified in the state, local, or University face-covering policies should not set their own mask policies.

Because many people will be returning to campus from travel over spring break and mobility will be increasing in general, we strongly recommend wearing masks indoors

during the first two weeks of the spring quarter. Please monitor yourself daily for symptoms and **stay home if you are sick**. It's also strongly recommended to **get tested after travel**.

While optional, we continue to welcome and encourage [mask-wearing](#) during the spring quarter. You can pick up free masks at a variety of locations on each [UW campus](#).

Spring quarter classes

Even with the improvements in the public health situation, the coronavirus continues to circulate so we must plan for unexpected disruptions to individual classes as instructors need to stay home and/or if there are significant numbers of students in a class who are ill at the same time. As during the winter quarter, we request that instructors be flexible about student absences due to illness or other coronavirus-related disruptions, including the need to quarantine or because of closures to caregiving services that may affect students who are caregivers. And while instructors should work to find typical and appropriate ways for students to make up missed coursework, please recall that they are not required to provide a remote option for classes that are being taught in person.

Spring quarter operations

Continuing to increase the number of in-person classes, experiences and services also means having more employees working on our campuses. Starting at or before the beginning of the spring quarter, supervisors should work with their teams to return to the in-person, hybrid, or remote work agreements arranged for employees prior to the Omicron wave and/or update these agreements to meet spring quarter operational needs. This can take place at an appropriate pace for each team's specific needs and goals. Supervisors should continue to provide flexibility to account for the many individual circumstances and unexpected coronavirus-related disruptions, such as caregiving support, that their team members encounter.

A [summary of UW coronavirus mitigation measures](#) is available at uw.edu/coronavirus.