



The Physics Observer

Dec 9, 2022

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UPCOMING

EVENTS

Monday - Friday,
December 5-9, 2022 -
9:00am, see location(s)

[here:](#)

[INT Hybrid Workshop:
Dense Nuclear Matter
Equation of State from
Heavy-Ion Collisions](#)

Tuesday, December 13,
2022 - 11:30am, PAT
C-520:

[Physics Department: Final
Exam: Many body
dynamical delocalization
of kicked ultracold
quantum gases](#)

[Jun Hui See Toh](#)

Welcome

The Physics Observer is a periodic bulletin of happenings in and around UW Physics. Our goal is to share information of 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 may be sent to the editor, physrecp@uw.edu.

Chair's Corner (L. Yaffe)

The end of the quarter is nearly here, with classes ending this week and final exams next week. The New York Times recently published a thought-provoking [essay by Molly Worthen](#), discussing the historical shift to written exams and away from oral exams in most higher education institutions. The usual justifications for this involve concerns over the time required to give oral exams in larger classes, and the greater stress that oral exams can induce in many students. But it is also true that studying for and undergoing oral exams develops skills in oral communication and thinking on one's feet which are very valuable in many professions. Regardless of one's view on this matter, it is an interesting essay to read and consider.

I wish everyone a peaceful, pleasant and relaxing holiday break this year. Winter quarter classes will start right after New Year's Day on January 3, and this year the department's annual holiday party will be a post-holiday gathering on January 6. Best wishes to all.

Milestones & Arrivals

- ★ Welcome Brenna Mulvany, the new Academic Counselor in Student Services.
- ★ Welcome to Sarah Kaye, the new Senior Computer Specialist with PACS.

Funding Announcements

- ❖ [Research Scientist Fernando Vila](#) received \$65K from the US Department of Energy for the Consortium for Operando and Advanced Catalyst Characterization via Electronic Spectroscopy and Structure.
- ❖ [Professor Xiaodong Xu](#) received \$765K from the US Department of Energy for the EFRC's research on programmable quantum materials (Pro-QM).
- ❖ [Professor Martin Savage](#) received \$258K from the US Department of Energy for QuantISED theory at UW.
- ❖ [Professor Gerald Miller](#) received \$500K from the US Department of Energy for theoretical nuclear physics.
- ❖ [Professor and Director of CENPA David Hertzog](#) received \$2.9 M from the US Department of Energy (DOE) for Experimental Nuclear Physics.

(Advisor: Subhadeep Gupta), University of Washington

Friday, January 6, 2022 - 3:00-5:00pm, Kane (Walker-Ames):
[Physics Department: Holiday Party](#)

Friday-Sunday, January 20-22, 2023:
[APS Conference for Undergraduate Women in Physics.](#)

SOCIAL MEDIA

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[Vimeo](#)

[Pinterest](#)

- ❖ [Professor Xiaodong Xu](#) received \$100K from the US Department of Defense for Magnetic van der Waals Heterostructure Photo-Spintronics.
- ❖ [Associate Professor Kai-Mei Fu](#) received \$241K from the US Department of Energy for the Center for Co-design of Quantum Computing.

Department Resources & News

- The Physics Department's annual holiday party will be on Friday January 6, from 3-5pm.
- The physics Department will be hosting an event to honor Lillan McDermont's legacy on January 18th.
- The Physics Slam event hosted by CUWIP will take place on January 21, 8-9:30pm, Tickets [here](#).

Assorted Talks & Meetings

December 9, 2-4pm PST, US-CMS webinar on their Program for Undergraduate Research Summer Experience (PURSUE) program for undergraduate students potentially interested in a 2023 summer internship. See [here](#) and [here](#) for more info. Register for the webinar [here](#).

December 15, 1-2pm PST, DOE Office of Science public webinar on multiple programs and initiatives including Early Career and EPSCoR. Register [here](#).

April 15-18, 2023, [APS in-person April Meeting](#), Minneapolis. Abstract submission opens November 16.

April 24-26, 2023, [APS virtual April Meeting](#), Minneapolis. Abstract submission opens November 16.

Funding Announcements

[Applications](#) solicited for summer internships from the German Academic Exchange Service (DAAD). Opportunities for undergrads, graduate students, postdocs and faculty. Deadline December 15, 2022.

[Prep-proposals](#) solicited for Keck Foundation Science and Engineering grants. \$1M. Limited submissions, internal UW deadline April 20, 2023.

[DOE Computational Science Graduate Fellowships](#). US citizens or permanent residents only. Application info [here](#). [Info webinar](#) on December 8, 11:30am PST.

[NSF Major Research Instrumentation \(MRI\)](#) program, limited submission, internal UW deadline January 4, 2023.

[DOE Scholars program](#), supporting internships for summer or longer period at multiple DOE facilities, for undergraduate or graduate students. Must be a US citizen. [Application](#) deadline January 23, 2023.

[NRC research fellowships](#) at [multiple federal facilities](#) for postdocs and senior researchers. Winter application cycle deadline February 1.

Job Opportunities

- [Associate Editor](#) (remote), materials research & applied science, American Physical Society
- [Visiting Assistant Professor](#) in Physics, Siena College.
- [Instructor of Physics](#), Charleston College.
- [Physics faculty](#) (open rank), as part of a cluster hire in quantum sciences, Washington University.
- [Assistant professor](#), Electrical and Computer Engineering, Princeton University.
- [Assistant professor](#), theoretical physics, UC Berkeley.
- [Tenure-track faculty](#), theoretical physics of quantum matter, Cal State Long Beach.
- [Tenure-track faculty](#), applied physics, Cornell.
- [Tenure-track faculty](#) in materials physics, open rank, Texas State University.
- [Multiple tenure-track faculty](#) in quantum science and technology, open rank, University of Michigan.
- [Tenure-track faculty](#) in condensed matter physics, open rank, University of Notre Dame.
- [Tenure-track faculty](#) in experimental condensed matter or materials science, New Mexico State University.
- [Assistant professor](#) in experimental condensed matter physics, University of Maryland.
- [Tenure-track faculty](#), Western Michigan University.

Selected Publications

Mixed-dimensional moiré systems of graphitic thin films with a twisted interface, D. Waters, E. Thompson, D. Xiao, M. Yankowitz, et al., <https://arxiv.org/abs/2211.15606>,

Snowmass Cosmic Frontier Report, G. Rybka & many others, <https://arxiv.org/abs/2211.09978>.

Preparation for Quantum Simulation of the 1+1D O(3) Non-linear σ -Model using Cold Atoms, A. Ciabarella, S. Caspar, H. Singh, M. Savage, [arXiv:2211.07684](https://arxiv.org/abs/2211.07684).

UW Coronavirus Response Information

- Current pandemic information on the [UW Covid-19 tracking dashboard](#).
