

The Physics Observer

February 5, 2021

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UPCOMING EVENTS

- February 8, 2021, 12:30pm:
 Physics Colloquium, David Tong
- February 8-11, 2021: AAAS Annual Meeting
- February 12, 2021: <u>Akaxia Cruz General Exam</u> (Chair: Thomas Quinn)
- February 18-21, 2021: National Mentoring
 Community Conference
- February 22, 2021, 4:00pm: Physics Colloquium, Misha Lukin (Harvard)
- March 6, 2021: 2021 PhysTEC Conference
- March 15-19, 2021: APS March Meeting

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, Alexis Hall.

Chair's Corner (L. Yaffe)

A belated congratulation to Professor David Hertzog who has been appointed as the first recipient of the Arthur B. McDonald Endowed Professorship. This new professorship honoring Art McDonald was created through the generous donations of emeritus professors Hamish Robertson and Eric Adelberger. David promises that we'll be hearing the much anticipated first results from the muon g-2 experiment soon.

Many faculty have been busy writing grant proposals, on top of their teaching and research; last month our fiscal staff were deluged with an unusually large number of proposal submissions. Thanks to the staff for coping and good luck for all the proposals.

Covid vaccinations for older age groups have started, and some of us have managed to get a first shot. I am, of course, hoping that the pace of vaccinations in our area will quickly ramp up and that we will be back to in-person instruction at least by next autumn, if not this summer.

Research Awards & Grants

- ❖ <u>Director of CENPA and Professor David Hertzog</u> is the first recipient of the Arthur B. McDonald Endowed Professorship.
- ❖ <u>Professor Stephen Sharpe</u> received 500K from the US Department of Energy for Theory of Particles, Fields, and Strings 2020.
- ❖ <u>Assistant Professor Jiun-Haw Chu</u> received 200K from the Air Force Office of Scientific Research for Strain control topological quantum materials.
- Professor Henry Lubatti received 13K from Brookhaven National Laboratory for ATLAS Muon Upgrade Construction Off-project.
- ❖ <u>Professor Gordon Watts</u> received 17K from the US Department of Energy for US ATLAS IRIS-HEP Institute Buyout 2021.

Department Resources & News

The Annual UW Physics Undergraduate Career Panel is **Wednesday**, **February 10 at 5:00** - **6:30 pm**. For meeting information, please contact Professor Marjorie Olmstead at ufaphys@uw.edu.

SPS Lunchbox. Each Monday at 12:30 pm, join other undergraduates to discuss physics and life as a physicist with the department colloquium speaker. Connect to this <u>Zoom Link</u>. This is a great opportunity for community in these unconventional times. Email <u>uwspsofficers@gmail.com</u> to get on the SPS mailing list.

• April 17-20, 2021: APS April Meeting

SOCIAL MEDIA

<u>Instagram</u>

<u>Facebook</u>

YouTube

Twitter (@physicsuw)

Vimeo

Pinterest

CONTACT US

physrecp@uw.edu amhall2@uw.edu <u>UWCFD raises over \$2,040,000 for those in need</u>: Faculty, staff and retirees came together this fall to support their favorite nonprofit organizations and causes through the UW Combined Fund Drive.

The popular technology and science website <u>arstechnica.com</u> has started publishing a <u>seven article series</u>. Miguel Morales wrote on Quantum Mechanics. These articles introduce some of the beautiful and subtle aspects of Quantum Mechanics and how they permeate our technological lives. The articles contain no math, but endeavor to go beyond typical introductions by being pedagogical and introducing more advanced effects and applications (neutron interferometers, quantum dots, astro combs, etc.). Articles will appear each Sunday through late February.

APS Pi Day Wiki Editathon: On Sunday, March 14 (12–3 pm et), at the outset of the 2021 APS March Meeting, scientists will come together (virtually) for the Women Make the World Go Round: A Pi Day Wiki Editathon on the occasion of Women's History Month. After a quick introduction, we will gather in small groups and create and improve Wikipedia pages about women and other gender minorities in physics. Register here.

Funding Announcements

Applications open for APS/IBM research internships for undergraduates in underrepresented groups. See here. Deadline **February 15, 2021**.

The FACE foundation, which supports French/American cultural exchange, solicits applications for cutting-edge, multidisciplinary research projects involving a team of younger researchers. Awards are up to 20K over 2-3 years spilt equally between American & French teams. See here. Deadline **February 24, 2021.**

Applications are open for the spring 2021 round of UW Royalty Research Fund grants. See here. Deadline **March 1, 2021**.

Applications open for various <u>NSF Data Science & Statistics Research opportunities</u> for undergraduates, graduate students, and postdocs. Deadline for summer internships: **March 31, 2021**.

The OPRA association solicits applications for grants of up to 70K/yr for innovative research in nuclear and particle physics. See here. Deadline **April 15, 2021.**

NSF solicits letters of intent for its Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (NSF INCLUDES) program, which will fund grants of up to 10M. See here and here and here. This is limited submission opportunity with internal UW deadline of May 6, 2021.

Job Opportunities

- Assistant Teaching Professor in Physics, University of Washington Tacoma, School of Interdisciplinary Arts and Sciences. Apply here.
- Assistant Professor in Space Physics, University of California Los Angeles Department of Atmospheric and Oceanic Sciences. Apply here.

Selected Publications

"Decay amplitudes to three hadrons from finite-volume matrix elements", S. Sharpe et al., see here.

"A Trailhead for Quantum Simulation of SU(3) Yang-Mills Lattice Gauge Theory in the Local Multiplet Basis", A. Ciavarella, N. Klco, M. Savage, see here.

"Non-volatile reconfigurable integrated photonics enabled by broadband low-loss phase change material", A. Majumdar et al., see here.

"Cold ion beam in a storage ring as a platform for large-scale quantum computers and simulators: challenges and directions for research and development", T. Shaftan and B. Blinov, see here.

"Competing correlated states and abundant orbital magnetism in twisted monolayer-bilayer graphene", M. He, Y. Li, Z. Fei, X. Xu, M. Yankowitz et al., <u>see here</u>.

"A Low-Frequency Torsion Pendulum with Interferometric Readout", M. P. Ross, K. Venkateswara, C. A. Hagedorn, C. J. Leupold, P. W. F. Forsyth, J. D. Wegner, E. A. Shaw, J. G. Lee, J. H. Gundlach, <u>see here</u>.

UW Coronavirus Response Information

<u>Current UW status: Phase 2</u>. The University of Washington's Bothell, Seattle and Tacoma campuses are in Phase 2 of the COVID-19 recovery, in accordance with <u>Washington's Safe Start plan</u> and the state's <u>Campus Reopening Guide</u>. More information can be found at <u>COVID-19 FAQs</u> (source: UW Medicine).

University of Washington progress to more in-person classes and operations depends on the effective distribution of vaccines and on each of us continuing to follow health guidance. We should each continue to practice the 3 W's — Wear a mask, Wash your hands, Watch your distance, — and take part in Husky Coronavirus Testing.

<u>Enroll in Husky Coronavirus Testing</u>: You can help stop the spread of COVID-19 by signing up for Husky Coronavirus Testing, even if you don't come to a UW campus regularly. Community testing helps researchers understand the prevalence of the virus in our community.

<u>COVID-19 vaccine information</u> (Updated: Feb. 3, 2021): The Washington State Department of Health developed a timeline for when different populations are eligible to receive COVID-19 vaccines. The University strongly encourages UW employees and students get vaccinated when they become eligible. UW Medicine is administering vaccines, including to UW community members, based on eligibility criteria and supplies.

<u>Quarantine and Isolation Guidance</u> (Updated January 21, 2021). To prevent the spread of COVID-19 in our communities, stay home and avoid contact with other people when:

- 1) You have symptoms of COVID-19.
- 2) You test positive for COVID-19.
- 3) You have close contact with a person who has COVID-19.

"Why Vaccines Alone Will Not End the Pandemic", by Matthew Conlen, Denise Lu and James Glanz, Jan. 24, 2021, The New York Times.