

The Physics Observer

June 3, 2020

In This Issue

Welcome

Chair's Corner

Upcoming Events

Milestones & Arrivals

Research Awards & Grants

Funding & Meeting Announcements

Job Opportunities

Selected Publications

<u>UW COVID-19 Response</u> <u>Information</u>

UW COVID-19 June Events

UPCOMING EVENTS

> June 4, 2020, 3:30pm:

Physics Virtual Award and Appreciation Gathering

> June 13, 2020:

Physics Virtual Graduation

- ➤ July 8-July 10, 2021: <u>Summiting the Unknown</u>, Celebrating the Legacy of Ann Nelson
- ➤ July 11-20, 2021 Snowmass 2021: High Energy Physics Community Planning

GENERAL & FINAL EXAMS

> June 5, 2020, 4:00 pm:

Ibrahim A Abdurrahman General Exam (Advisor: Aurel Bulgac), TBA

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)

Spring quarter is nearly over, and it has been challenging, very challenging. Horrifying events have been in the news and generating trauma nationwide. Some Physics students have family members affected by Covid-19. At least one's family also has a business sadly damaged by the recent unrest downtown. Unemployment levels are awful.

Against that backdrop, it is hard to write a cheerful upbeat missive, and yet there are multiple developments this quarter about which everyone should feel good. First, with stunningly little notice, we succeeded in converting all scheduled classes into on-line formats. This took tremendous efforts from many. But we managed and by all reports classes this quarter have worked remarkably well. I am deeply grateful to all the faculty, staff, and student TAs who stepped up did what it took to accomplish this.

Second, experimental research is beginning to ramp back up after being shut down most of the quarter, with newly instituted procedures for distancing, protective gear, and frequent disinfection. Thanks to the safety committee and all involved.

Finally, hiring efforts associated with this year's search for new faculty have just concluded, with truly remarkable results. Four new tenure-track faculty, plus an additional partner accommodation, will join the department in 2021. These are Natalie Paquette, Mark Rudner, Marilena Loverde, Masha Baryakhtar, and Quentin Buat. I look forward to all their arrivals!

Milestones and Arrivals

➤ Tom Burritt celebrates 25 years of service with UW on June 1st.

Research Awards and Grants

- ➤ Professor David Hertzog received 50K from the American Physical Society for developing new directions in fundamental physics.
- ➤ Professor Kai-Mei Fu received 30K from the National Science Foundation for a hybrid photonics device for efficient quantum entanglement.
- ➤ Professor Gerald Miller received 850K from the US Department of Energy for theoretical nuclear theory.
- ➤ Professor Xiaodong Xu received 127K from MIT for Ab Initio Solid-State Quantum Materials: Design, Production, and Characterization at the Atomic Scale
- ➤ Professor Shih-Chieh Hsu received 22K from Brookhaven National Laboratory for physics analyses and ITk pixel DAQ.

> June 5, 2020 at 1pm:

Natalie Klco Final Exam (Advisor: Martin Savage): Calculating Nature Naturally: Toward Quantum Simulation of Quantum Fields (Link here.)

> June 5, 2020 at 4pm:

Ibrahim A. Abdurrahman (Advisor: Aurel Bulgac) General Exam: Nuclear fission and collisions within time dependent extensions to superfluid systems in density functional theory (Link here.)

June 8, 2020 at 11am:

Emily E. Clark (Advisor: Jose Kutz) Final Exam: Greedy sparse sensor selection from a practical perspective (Link here.)

> June 9, 2020 at 2pm:

Daniel E. Dylewsky (Advisor: Jose Kutz) Final Exam: Data-Driven Methods for Phyics-Constrained Dynamical Systems (Link here.)

> July 9, 2020 at 1pm:

Alan Kaptanoglu (Advisor: Steven Brunton) General Exam (Link here.)

SEMINARS

- ➤ May 11-June 5, 2020: INT Program INT-20-1c Chirality and Criticality: Novel Phenomena in Heavy-Ion Collisions
- ➤ June 4, 2020, 2:30pm: CENPA Seminar: Dr. Christian Schneider (UCLA). Link here.

CONTACT US

physrecp@uw.edu amhall2@uw.edu

Assorted Talks and Meeting Announcements

The UW is hosting a global journal club series for the XAFS community. You can find the schedule of talks <u>here</u>. Contact Gerald Seidler (<u>seidler@uw.edu</u>) for more information.

The INT is running weekly online S@INT seminars on **Thursdays at 10:30 am**. See upcoming and past talks <u>here</u>.

Stanford is hosting a <u>virtual AMO series</u> held weekly on **Fridays at 12 pm PDT**. It can be accessed at this Zoom link and at this YouTube channel if the webinar is full.

October 14-16, 2020: Princeton Gravity Initiative: <u>PCTS Workshop, Exploring Supermassive Black Holes</u>, Registration is <u>open</u>.

Job Opportunities

- Physics Lab Specialist, Gonzaga University (Spokane, Washington). Initial review beginning June 15. Apply here.
- ➤ DESI Project Scientist, Lawrence Berkeley National Laboratory (Berkeley, California). Apply here.
- Research Associate, Stanford University/SLAC National Accelerator Laboratory (California). Apply here.
- Research Associate Professor, University of Washington Institute of Nuclear Theory (Seattle, Washington). Apply here.

Selected Publications

"Layered Antiferromagnetism Induces Large Negative Magnetoresistance in the van der Waals Semiconductor CrSBr," X. Xu, et al., https://arxiv.org/abs/2005.06110.

"Giant microwave absorption in s- and d- wave superconductors," M. Smith, A. Andreev, B. Spivak, https://arxiv.org/abs/2005.00534.

"Hydrodynamic electron transport near charge neutrality," A. Andreev, et al., https://arxiv.org/abs/2004.13726.

UW Coronavirus Response Information

The UW has released guidelines for returning to in-person research involving hygiene and disinfecting procedures, PPE usage, and plans for physical distancing in the workplace, etc. You can view the webpage here. Specific information for faculty can be found here. The Physics Department Research Recovery Plan is here.

UW COVID-19 June Workshops and Seminars

Coexisting with COVID-19 Series (register here.)

- ➤ June 4th at 6:30pm: The New Essential Employee
- ➤ June 11th at 6:30pm: COVID and Mental Health
- ➤ June 18th at 6:30pm: History of Global Pandemics
- ➤ June 25th at 6:30pm: COVID-19 Models and Predicting the Future

<u>UW Foster School of Business Recovery and Reconstruction Workshops</u> (register <u>here.</u>)

- ➤ June 10th: Inventory and Supply Chain Management in Volatile Times
- ➤ June 17th: Leadership in Volatile Times
- ➤ June 24th: Reaching and Engaging Your Audience (or Your Customers) using Technology while Keeping Social Distancing

<u>Chronicle of Higher Education: Leading an Institution Through an Unprecedented Crisis</u> (register <u>here.</u>)

