

# **The Physics Observer**

#### July 9, 2020

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## SOCIAL MEDIA

Instagram: @uwphysics Facebook: Link <u>here.</u> YouTube: Link <u>here.</u>

## UPCOMING EVENTS

➢ July 14-15, 2020: Experiences of Black STEM in the Ivory: A Call to Disruptive Action. Register here.

July 8-10, 2021:
<u>Summiting the Unknown</u>,
Celebrating the Legacy of
Ann Nelson

➢ July 11-20, 2021 Snowmass 2021: High Energy Physics Community Planning

# 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 <u>here</u>. Previous newsletters may be found on the physics website at <u>The Physics Observer Newsletter</u>. Information for future editions may be sent to the editor, <u>Alexis Hall</u>.

# **Chair's Corner (L. Yaffe)**

Summer has arrived! Although, here in Seattle, that means a lot of partly cloudy days and temperatures only reaching the mid-70s. We survived spring quarter, and summer quarter classes are underway. Teaching next autumn, for Physics, is planned to be entirely remote with at most one or two exceptions.

Our international students have just been cast into terrible uncertainty by the recent DHS announcement that the Covid-19 emergency waiver program for international students, allowing them to stay in the US while taking only online classes, may terminate. Our university leadership, our congressional delegations, and many other universities are working to try to get this ruling changed. We very much hope these efforts succeed.

# **Milestones and Arrivals**

- Research Scientists/Engineer Steven Troy has worked at UW for 5 years.
- Research Engineer Michael Huehn has worked at UW for 5 years.

# **Research Awards and Grants**

- > Physics major Keyan Gootkin was named a 2020 Goldwater Scholar.
- Associate Professor Kai-Mei Fu received an 8K grant from the NSF for EFRI ACQUIRE: An Integrated Quantum Communication Transmission Node.
- Professor Xiaodong Xu received 1.5M from the Air Force Office of Scientific Research for 2D Magic: New Science from Two-Dimensional MAGnetIC Heterostructures.
- Assistant Professor Alvaro Chavarria received 280K from the NSF for the 50-CCD tower of DAMIC-M to search for light dark matter particles.
- Assistant Professor Alvaro Chavarria also received 70K from FNAL for direct detection of dark matter with eV-to-GeV masses with a low background, multi-kilogram Skipper CCD array sensitive to single electrons.

# **Department Resources & News**

<u>This</u> online safety training is required for all employees before returning to on-campus work. All critical personnel authorized for on-campus work must complete this training.

Our virtual Physics graduation ceremony has been posted here.

Racial Equity Resources have been provided by the University of Washington:

- > <u>Anti-Racism resources</u> (UW Race & Equity Initiative)
- <u>Using Equitable Language Guide</u> (UW Marketing & Communications)
- <u>Racial Equity Programming Assessment</u> (Alumni & Stakeholder Engagement)

#### GENERAL & FINAL EXAMS

→ July 9, 2020 at 1pm:

Alan Kaptanoglu (Advisor: Steven Brunton) General Exam (Link <u>here.</u>)

▶ July 9, 2020 at 1pm:

Paul Malinowski "Turning an unconventional superconductor with elastic strain" (Advisor: Jiun-Haw Chu) General Exam (Link <u>here.</u>)

#### CONTACT US

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#### **Assorted Talks and Meeting Announcements**

A series of online seminars on quantum simulation for nuclear physics will be starting in a few weeks, on **Thursdays at 9am** with information <u>here</u>.

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

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

#### **Job Opportunities**

- > Academic Coordinator, University of California Irvine
- Lecturer in Physics, University of California Los Angeles Department of Physics and Astronomy
- Research Assistant Professor in Experimental Particle Physics, Vanderbilt University Department of Physics and Astronomy

# **Selected Publications**

"Symmetry, transactions, and the mechanism of wave function collapse," J. Cramer and C. Mead, <u>https://arxiv.org/abs/2006.11365</u>.

"Optimal evolutionary decision-making to store immune memory," O. Schnaack and A. Nourmohammad, <u>https://arxiv.org/abs/2007.01363</u>.

"Photon-mediated entanglement scheme between a ZnO semiconductor defect and a trapped Yb ion," J. Lilieholm, V. Niaouris, A. Kato, K.-M. Fu, B. Blinov, https://arxiv.org/abs/2006.14728.

"Semiclassical theory of the circular photogalvanic effect in gyrotropic systems," L. Golub, E. Ivchenko, B. Spivak, <u>https://arxiv.org/abs/2006.11323</u>.

"Geometries with mismatched branes," A. Karch and L. Randall, <u>https://arxiv.org/abs/2006.10061</u>.

"Towards windproofing LIGO: Reducing the effect of wind-driven floor tilt by using rotation sensors in active seismic isolation," M. Ross, K. Venkateswara, J. Gundlach, et al., <u>https://arxiv.org/abs/2003.06447</u>.

## **UW Coronavirus Response Information**

Important updates regarding autumn quarter, as of June 29th, 2020:

- Students, employees, and visitors are REQUIRED to wear masks when they are indoors near other people and outdoors if people are unable to stay six feet apart. Contact tracing and voluntary expanded testing to spot any potential outbreaks early will also be part of campus protocols.
- Students, staff, and faculty who get sick now and in the fall must stay home and selfisolate. Employees should follow normal procedures when calling out sick, but must also notify an Employee Health Center if they test positive or are suspected to have COVID-19.
- There is a Back-to-School Town Hall with UW leaders at 10:30am on Friday, July 10<sup>th</sup> to answer any remaining questions.

Check <u>this</u> webpage for updates on the status of UW's campus. Right now, we are in Phase 2. This means that:

▶ <u>Masks are required</u> on all campuses.

- Telework is strongly encouraged for all non-critical personnel, and all in-person work must adhere to all appropriate safety measures and unit <u>COVID-19 Prevention</u> <u>Plans</u>.
- In-person instruction is not allowed except for essential clinical instruction that has been pre-approved.
- > Gatherings of more than five people are not permitted.

You can get answers to frequently asked questions about COVID-19 and UW's pandemic response <u>here.</u>

UW has created a Back-to-the-Workplace Task Force to ensure the safe return of more employees back to campus. You can view their webpage <u>here.</u>

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 <u>here</u>. Specific information for faculty can be found <u>here</u>. The Physics Department Research Recovery Plan is <u>here</u>.

UW Environmental Health and Safety has released a compilation of COVID-19 health and safety resources that can be found <u>here</u>. Specifics on the COVID-19 Prevention Plan can be found <u>here</u>.

The UW Medicine Emergency Response to COVID-19 Fund can be found here.