

The Physics Observer

Jun 4, 2024

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Saturday, June 8, 2024-10:00am, PAA A102, A118 Physics Graduation

EXAMS

Wednesday, June 5, 2024 - 12:30pm, PAT C-520 **General Exam** Kade Cicchella

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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 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)

Next Saturday is our annual Commencement Day. The department will celebrate its Physics bachelors, masters, and PhD degree recipients in our morning event, prior to the afternoon commencement ceremony in Husky stadium. Both I (in my academic regalia) and Associate Chair Alejandro Garcia will be officiating and celebrating all our graduating students.

This will be my last newsletter note as department chair. There will soon be an announcement about the new chair. I want to thank everyone who has contributed to the department in many different ways during my term as chair, including all our donors, large and small, who have made gifts which support students, faculty, community events, scholarships, professorships, and more.

May everyone have an enjoyable summer – preferably both (somewhat) restful as well as productive!

Milestones & Arrivals

- ★ Associate Teaching Professor <u>Kazumi Tolich</u> celebrates 10 years with UW!
- ★ Associate Teaching Professor <u>Donna Messina</u> celebrates 25 years with UW!

Awards & Grants

- Professor Jens Gundlach received 784K from NIH for Nanopore sequencing.
- Professor Henry Lubatti received 38K from BNL for HL-LHC Pixels IST 2023.
- Associate Professor Suzanne Brahmia received 49K from NSF for Geron.
- Associate Professor Gray Rybka received 600K from DOE for ADMX-G2.
- Associate Professor Marilena Loverde received NASA for Primordial Phys.
- Assistant Professor Alvaro Chavarria received 40K from FNAL for LG CCD DM.

Assorted Talks & Meetings.

- ❖ June 3-7, 2024, APS DAMOP meeting, Fort Worth.
- ❖ June 9-22, 2024, Quantum Connections School, Stockholm, Sweden.
- ❖ June 17-20, 2024, AAAS Pacific Division Annual Meeting, UC San Diego.
- ❖ June 20-22, 2024, APS Northwest Section Annual Meeting, UW Bothell.
- ❖ July 8-19, 2024, <u>Prospects in Theoretical Physics summer school</u>, Princeton.
- ❖ July 15-26, 2024, <u>US Quantum Information Summer School</u>, ORNL, Tennessee.
- ❖ July 15-26, 2024, <u>36th National Nuclear Physics Summer School</u>, Bloomington IL.
- ❖ July 22-26, 2024, <u>PCCM summer school on Condensed Matter Physics</u>, Princeton.
- ❖ August 19-23, 2024, Quantum Information and Physics workshop, Princeton.

Funding Announcements

- Applications solicited for <u>APS-Simons Travel and Professional Development</u> <u>Awards</u>, open to non-tenure track instructors.
- Proposals solicited for <u>NSF Research Traineeship Institutional Partnership Pilot</u> (<u>NRT-IPP</u>) program awards, \$4.5M over 5 years. Limited submission, internal UW deadline June 19, 2024.

Job Opportunities

- <u>Teaching Professor</u>, University of Minnesota- Twin Cities
- Open Rank Faculty, UNC Chapel Hill
- <u>Visiting Assistant Professor</u>, University of Tampa
- Inertial Confinement Fusion Physicist, Lawrence Livermore National Laboratory
- <u>Lecturer</u>, Purdue University
- Assistant Professor of Physics and Astronomy, University of Hawai'i at Hilo
- <u>Physics/Astronomy Lecturer</u>, Central Michigan University

Selected Publications

Visualizing the microscopic origins of topology in twisted molybdenum ditelluride, E. Thompson, K. T. Chu, F. Mesple, C. Hu, Y. Zhou, H. Park, J. Cai, E. Anderson, J.-H. Chu, X. Xu, D. Xiao, M. Yankowitz, et al., <u>arXiv:2405.19308</u>.

Radiative corrections to superallowed β decays in effective field theory, V. Cirigliano, W. Dekens, et al., arXiv:2405.18469.

Time-resolved X-ray Spectroscopy from the Atomic Orbital Ground State Up, J. Kas, J. Rehr, et al., <u>arXiv:2405.16025</u>.

The Kohn-Luttinger Effect in Dense Matter and its Implications for Neutron Stars, M. Kumamoto, S. Reddy, <u>arXiv:2405.12243</u>.

Short-range tests of the equivalence principle, G. Smith, C. D. Hoyle, J. Gundlach, E. Adelberger, B. Heckel, H. E. Swanson, <u>arXiv:2405.10982</u>.

Varying-constant cosmology from hyperlight, coupled scalars, M. Barkayhtar, Z. Weiner, et al., arXiv:2405.10358.

Steps Toward Quantum Simulations of Hadronization and Energy-Loss in Dense Matter, R. Farrell, M. Illa, M. Savage, <u>arXiv:2405.06620</u>.

Topological flat bands in a family of multilayer graphene moiré lattices, D. Waters, E. Thompson, A. Okounkova, M. He, X. Xu, M. Yankowitz, et al., <u>arXiv:2405.05913</u>.

Giant microwave absorption in the vortex lattice in *s*-wave superconductors, T. Liu, A. Andreev, B. Spivak, et al., <u>arXiv:2404.16998</u>