



Physics Digest

News, info, and updates for Ph.D. students in Physics at UW–Madison

July 30th, 2021

Announcements

Fill out EGARS for Summer 2021

Deadline: July 29th, 2021

All continuing Physics Ph.D. students including RA's and TA's should complete [EGARS](#) before July 29th. If you are not sure whether you will be RA or TA in the fall, please put "TA." Please contact [Jim Reardon](#) with any questions.

Payroll Schedule Changes Are Here

The UW system has moved employees and graduate students on the monthly payroll schedule to the biweekly payroll schedule. The first change employees will experience as part of the move to the biweekly payroll is receiving a partial monthly paycheck on July 30 for time worked July 1 – July 17. On August 12, employees will receive their first biweekly paycheck for time worked July 18 – July 31. [Here are some notes about deductions and taxes:](#)

- Due to the transition, the paycheck received on July 30 will have full benefits deductions for the month of July.
- The next paycheck, on Aug. 12, will have no benefits premiums deducted.
- Beginning with the following biweekly paycheck on Aug. 26, half of the benefits premiums will be deducted from each of the first two biweekly paychecks each month. These include health, dental, vision, life, income continuation, and accident insurance.
- In months when there are three pay periods, benefits deductions will not be taken from that pay period with the exception of Wisconsin Retirement System, Tax Sheltered Annuity 403(b) and Wisconsin Deferred Compensation 457 contributions.
- The partial monthly paycheck on July 30 is a one-time case where you will see less federal tax withheld than usual. Your next paycheck, dated Aug. 12, will accurately reflect annual withholding at your full annual taxable wage amount.

Visit the [Single Payroll resources web page](#) for frequently asked questions, budget planning information and [updated 2021 payroll schedules](#). Additional resources include [pay date models](#), [guides on updating contributions and withholdings](#), and a [paycheck estimator](#).

DEI Micro-Courses Available

The Office of Inclusion Education and UW-Madison Libraries, have partnered to develop two online micro-courses to expand your knowledge of diversity, equity, and inclusion (DEI). These non-graded, self-paced and interactive professional learning objects aim to expand learners' knowledge of social justice, including race in your classroom and facilitating discussions around racial topics. To participate in these micro-courses, click [here](#).

Fall 2021 Enrollment Happening Now!

[Fall 2021 enrollment began on April 12th](#). If you need to enroll in Physics 990, please review the instructions for adding by course number and the Physics 990 course numbers for Fall 2021 [here](#). The Graduate School maintains a policy page on [minimum enrollment requirements](#). For questions, contact [Jackson Kennedy](#).

Thesis Defenses

Many-body Theory of Collective Neutrino Oscillations

Date: August 4th, 2021; 4:00 PM

Michael Cervia (Baha Balantekin, Faculty Advisor), Physics PhD Graduate Student, will defend their thesis.

High-Energy Cosmic Neutrinos as a Window to the Universe

Date: August 16th, 2021; 2:30 PM

Qinrui Liu (Karle Albrecht, Faculty Advisor), Physics PhD Graduate Student will defend their thesis.

Untriggered Searches for Astrophysical Neutrino Transients Using Data from the IceCube Neutrino Observatory

Date: August 19th, 2021; 2:00 PM

Will Luszczak (Albrecht Karle, Faculty Advisor), Physics PhD Graduate Student, will defend their thesis.

Coherent and Cavity-Based Measurement of Two-Particle States

Date: August 23rd, 2021; 4:00 PM

Joelle Corrigan (Mark Eriksson, Faculty Advisor), Physics PhD Graduate Student, will defend their thesis.

Upcoming Events

Department of Physics Event Calendar

See the departmental events calendar to be sure you don't miss any of the upcoming seminars, workshops, or journal clubs, workshops!

Student Affairs: Campus Happenings

See the UW Student Affairs news website and scroll to the "current happenings" listing each week.

Professional Development

Designing Writing Activities to Overcome Teaching and Learning Challenge in any STEM Course

Date: August 4th, 2021; 11:30 AM - 1 PM CT

Well-designed writing assignments can help students learn the subject matter of a course more deeply, increase students' engagement with complex topics, and give course instructors valuable insight into what students understand—and what they don't. In this interactive workshop from the Delta Program, they will share advice, examples, and best practices for using writing to its full potential in STEM courses. To register, click [here](#).

Effective Teaching: Make Your Learning Outcomes Drive Instruction

Date: August 16th, 2021; 1 PM - 2:30 PM CT

Want to make sure your students are leaving your class with the knowledge they need? Build effective lesson plans by starting with student-centered learning outcomes that you will learn from this Delta Program workshop. To register, click [here](#).

Chicago Quantum Exchange Summer Workshop Series

Date: August 19th; 12 – 1 PM CT

The Chicago Quantum Exchange, NSF QLCI on Hybrid Quantum Architectures and Networks (HQAN), and Q-NEXT are pleased to invite our members and partners to our joint Summer Workshop Series: a virtual series on different perspectives on quantum technology commercialization and career pathways. The final workshop will be held on August 19 at 12pm CST, with optional networking afterward. Please click [here](#) to register.

Teaching Inclusively & Equitably from the First Day of Class

Date: August 24th, 2021; 12:30 PM - 2:30 PM

First impressions matter, and research demonstrates that building a student's sense of belongingness is key to their academic success. So how can we, as classroom leaders and facilitators, ensure our students' first impression of class makes them feel comfortable and empowered to learn? In this Delta Program workshop learn how to set expectations and make a great impression starting on day one. To register, click [here](#).

UW-Madison Teaching Academy: 2021 TA-LEaP

Date: August 25th-26th, 2021

LEaP into teaching! Learn the basics of how we learn along with the 7 things UW-Madison students want most from their instructors! Explore the basics of syllabus, assignment and rubric design. Discuss assessment and learn the most common mistakes instructors make on exams, and how to avoid them! Learn simple active learning techniques that you can apply in your classroom immediately and start developing materials for your own course while you learn! Become part of a community of practice with colleagues in all disciplines and get connected to other teaching and learning programs across the campus through the Teaching and Learning Collaborative.

Remote and On-site Office Hours That Students Use

Date: August 25th, 2021; 10 AM - 12 PM CT

As instruction returns to in person, many educators are offering onsite office hours, and some will continue remote office hours that offer flexibility for students. Attend this Delta Program workshop to get concrete ideas and plan how you'll run your office hours to ensure your students get their needs met, and take advantage of collaborative opportunities while managing technical challenges. To register, click [here](#).

Women in Science Conference

Date: September 18th-19th, 2021

The Women in Science Conference (WISC) invites graduate students to attend and to apply to present their research. WISC is a conference led by graduate students with the intent of providing other women and gender minorities in STEM with an opportunity to highlight their research, as well as providing networking and career development opportunities with leading professionals in the field. Those attending the conference will be able to present their research through poster and oral presentations, participate in career development workshops and events, and attend three keynote talks by leading professional women in STEM. Registration is due by September 8th and applications to present and for grants to cover the cost of attendance are due August 20th. For more information, click [here](#).

Rising Stars Symposia

Date: September 2021

The University of Chicago invites applications for its 2021 Rising Stars Symposia, which will recognize the achievements of early career researchers working in the fields of Soft and Biological Materials, Quantum Science and Technology, and Experimental Particle Physics. For more information and to apply, click [here](#).

Employment Opportunities

IDA: Research Staff Analyst

The Naval Warfare Group at the Institute for Defense Analyses (IDA) is hiring a full-time Research Staff Member. IDA is a non-profit Federally Funded Research and Development Center (FFRDC) under contract with the Department of Defense to provide independent, objective, and rigorous analyses of national security issues. They are interested in American citizens who are either graduate students or post-docs who will be available this summer. For more information and to apply, contact Project Leader [Steve Rabinowitz](#).

UW-Madison ECE: Graduate Student Researchers

The UW-Madison Department of Electrical & Computer Engineering is hiring graduate students for research starting Fall 2021. The open research positions are in the areas of material growth, device design, and fabrication for electronics, optoelectronics, bio-photonics, and quantum applications. Research expenses, tuition, and stipend will be covered. For more information, click [here](#). To apply, contact [Professor Shubhra Pasayat](#) with relevant coursework, specific research interests, and your resume/CV.

CNM: Postdoctoral Appointee

The Center for Nanoscale Materials (CNM) is seeking a postdoctoral researcher for the Dissipation-aided Microwave-Optical Entanglement program. The program aims to develop a high-frequency superconducting piezo-optomechanical system combined with dissipation engineering technique to generate highly entangled microwave-optical photons. For more information and apply, click [here](#) and search for requisition number 410139. For questions, contact [Dr. Xu Han](#).

Q-Next Quantum Information Science Postdoctoral Appointees

The Q-NEXT Center will be hosting quantum information science postdoctoral openings with start dates in 2021. The postdoctoral scholars will have the opportunity to work at Argonne National Laboratory on projects of strategic national importance in quantum information science. For questions contact [Martin Suchara](#) and to apply, visit [here](#).

Useful Links

[Dates and Deadlines from the Office of the Registrar](#)

[Warrant Request Form](#)

[Graduate School Degree Deadlines](#)

Connect with us!



[Department of Physics](#)

1150 University Avenue, Madison, WI 53706

This newsletter is for Ph.D. students in Physics at UW–Madison; we update the mailing list at the start of each semester. Please contact phddigest@physics.wisc.edu with any questions.