

Yale Department of Physics

Yale Physics Newsletter

November 30, 2018

Hints & Tips!

Welcome to our new hints and tips section! Please email daphne.klemme@yale.edu with any helpful tips that will help us work to our best ability.

For any travel, business or personal, as soon as you know the dates you will be travelling book your flights for the best rates.

Climate and Diversity Committee News

A Note from the [Climate and Diversity Committee](#) (CDC).

Many of you know about our work, but here is a brief re-introduction of who we are and what we do.

In the CDC we aim to support the Department's goals to provide a safe, supportive, and inclusive environment for every member of our community. We are staff members, undergraduate and graduate students, and faculty committed to creating a work place whose core principles are based on diversity, equity, and inclusion, as we strive to obtain our goals of excellence in research, teaching, and mentoring.

We identify resources and best practice activities available within the Department and the University, as well as in the wider society, as climate and inclusion is also part of our global national discourse and we actively seek your ongoing input and suggestions for the enhancement of the professional climate and diversity of our Department.

Importantly, the CDC will help to identify confidential resources for any member of the Department should particular challenges arise.

Our goal of joining the Newsletter is to provide a weekly short contribution highlighting resources we consider interesting and relevant to the department.

Please look for it as we attempt to curate material that could make us all better members of the Department and of society at large.

The CDC convenes once a month. If interested in joining please contact Helen Caines (helen.caines@yale.edu, Chair of CDC). You may contact the whole committee at physics-cdc@mailman.yale.edu

Save the Date

Reading Week is December 7-13, 2018 with exams being December 13-19, 2018, starting at 7pm on December 13th. Good luck!

Seminars

Monday, December 3

- 2:30pm in Sloane Physics Lab 51. Graduate Methods Seminar. Sohan Vartak, Yale University, "Monte Carlo Methods".
- 3:30pm in Sloane Physics Lab 57. Physics Club Talk. Bjoern Schenke, Brookhaven National Laboratory, "How small a fluid can we make?". Host: John Harris/Helen Caines. Tea after the talk outside SPL 57.
- 4:00pm in Sterling Chemistry Lab 160. Department of Chemistry Lecture in Biophysical Chemistry. Dr. Maxim Prigozhin, Stanford University, "New methods to reveal the nanoscale motions of macromolecules"

Tuesday, December 4

- 11:00am in Yale Quantum Institute Seminar Room. Yale Quantum Institute Colloquium. Olivier Buisson, Institut NÉEL, "Fast high fidelity qubit readout using cross-Kerr coupling".
- 1:00pm in Sloane Physics Lab 52. Special Condensed Matter Theory Seminar. Amos Chan, Oxford, "Minimal Models and Spectral Statistics of Many-Body Quantum Chaotic Systems".
- 1:00pm in Wright Lab 216. Nuclear/Particle/Astrophysics Seminar. Friederike Bock, CERN, "Photon-related measurement in ALICE". Lunch in WLC-245 prior to seminar. [RSVP required](#).
- 2:30pm in Watson Center A-51. Yale Astronomy Post-Doctoral Fellows Seminar. Dr. Shuo Kong, Yale University, "Massive star and cluster formation in the ALMA era: what do we learn by comparing infrared dark cloud with Orion".
- 4:00pm in Sloane Physics Lab 52. Special Particle Theory Seminar. Bernardo Zan, EPFL Lausanne & Paris, "Walking, weak first order phase transition and complex CFTs". Host: Witold Skiba.

Wednesday, December 5

- 12:00pm in Wright Lab 216. Yale Physics Professional Development Organization. Panel discussion on Ph.D. summer internships. Luyao Jian, Xen Xiong, and Luyao Shi. Lunch is served starting at 11:45am [RSVP requested](#).
- 1:00pm in Becton Seminar Room. Solid State & Optics Seminar. Prof. Luqiao Liu, MIT, "Magnetic Switching with Topological Insulator and Compensated Ferrimagnet". Host: Charles Ahn.

3:30pm in Sloane Physics Lab 57. Yale Society of Physics Students Inaugural Beatrice Tinsley Prize Lecture. Asimina Arvanitaki, Perimeter Institute, “Novel Directions in the Search for New Physics”.

4:00pm in Sterling Chemistry Lab 160. Molecular, Cellular and Developmental Biology Seminar. Christopher Westlake, NIH, “Connecting membrane transport and reshaping to the primary cilium”. Host: David Breslow. Tea at 3:45pm.

4:15pm in Leet Oliver Memorial Hall 215. Department of Mathematics Colloquium. Amir Mohammadi, UCSD, “Effective results in homogeneous dynamics”.

Thursday, December 6

2:30pm in Watson Center A-51. Yale Astronomy & Astrophysics Colloquium. David Spergel, Princeton University, “Title TBA.

4:00pm in Sloane Physics Lab 52. Special Particle Theory Seminar. Varun Vaidya, Los Alamos, “Factorization violation for super-weak scale scattering”. Host: Witold Skiba.

Friday, December 7

12:00pm in Yale Quantum Institute Seminar Room. Yale Quantum Institute Colloquium. Isaac Chuang, MIT, “Quantum Signal Processing - A New Single-Qubit Approach to Quantum Algorithms.

12:00pm in Watson Center A-74. Center for Teaching & Learning STEM Education Seminar. Dr. Elise Lockwood, Oregon State University, “Computational Thinking and Activity in STEM Education: What Happens When Math Students Engage with Python Code”. [Please RSVP for lunch.](#)

3:15pm in Wright Lab 216. Wright Lab Artist-in-Residence Movement Workshop 2018. Emily Coates, Yale University, “The Choreographic Imagination: Movement Paradigms in Dance and Physics at Wright Laboratory”. [RSVP required.](#)

4:00pm in Kline Geology Lab 123. Geology & Geophysics Colloquium. Doug Erwin, Smithsonian Museum of Natural History, “Novelty, Innovation and the Origin of Animal Body plans”.

4:00pm in Sterling Chemistry Lab 160. Department of Chemistry Lecture in Biophysical Chemistry. Dr. Mikael Backlund, Harvard University, “Extracting hidden information from your fluorescence microscope: with applications to biological microscopy and more...”

For more seminars see: <http://physics.yale.edu/calendar>

[News](#)

Yale Travel News

Jetblue has special flat fares, **only** available through Egencia, from Hartford’s BDL to Washington’s Regan DCA airport. We have two fares in place: M@\$139 and Y@\$213. M is capacity controlled and is available furthest out and when we sell a certain number of seats at that price, it closes out and the higher \$213 kicks in. The \$213 is available up to the day of travel if we have 1 seat left as it is what we call “last seat availability”.

Both the \$139 and \$213 are fully changeable and cancellable to the day of travel, provided changes are made prior to the flight’s departure. Please make sure you book through Egencia to obtain these special rates.

[Click here for flyer with more information.](#)

Sandra Tranquilli (Graduate Registrar) Happy trails to you! And enjoy your retirement. The department will miss you (and your bagels).

Faustin Carter (PhD’15) was featured in the Yale Graduate School of Arts and Sciences News for his work at the South Pole. [Click here for the full story.](#)

Yale Day of Instrumentation - November 16, 2018

On Nov. 16, Yale celebrated the tangible evidence of its commitment to scientific inquiry and research excellence: its array of instrumentation. [Click here for full story.](#)

Four Yale faculty members named AAAS Fellows

Charles H. Ahn (William K. Lanman Jr. Professor of Applied Physics)

His previous awards include a fellowship from the American Physical Society and the American Vacuum Society’s Peter Mark Memorial Award. He has also earned an Alfred P. Sloan Fellowship, a Yale Junior Faculty Fellowship, the David and Lucile Packard Fellowship in Science and Engineering, and a National Science Foundation CAREER Award. Ahn was honored for his “leadership in the creation of complex oxide materials and heterostructures with picometer resolution and control of superconductivity, magnetism, and ferroelectricity.”

Ahn is director of the Center for Research on Interface Structures and Phenomena and is also director of the Yale Institute for Nanoscience and Quantum Engineering.

[Click here for the full story in Yale News](#)

Peter Rakich (Associate Professor of Applied Physics) **research in Yale News**, “Making sound ‘chill out’”. Yale scientists have discovered that laser light can be used to cool traveling sound waves in a silicon chip. Their findings appear in the Nov. 27 online edition of the journal Physical Review X. [Click here for the full story in Yale News.](#)

3rd Annual WWN Recognition Award – Nominations Are Now Open!

The WWN Recognition Award is an annual award that recognizes up to five women currently employed at Yale who have been exemplary members of the community at Yale. The individuals receiving this honor may be selected for a wide range of achievements, but overall, will have distinguished themselves through a commitment to changing the University through their personal efforts. For example, an awardee could have had an impact on a project or team by demonstrating a positive attitude, gone beyond the call of duty to get the job done, or demonstrated a love for learning new skills.

The nomination process is open to women Yale employees in the following job categories: Service and Maintenance (S&M), Clerical and Technical (C&T), and Managerial and Professional (M&P). Up to five award recipients will be chosen; one for each category. Nominations may be made online until Friday, December 21st.

Nominators are asked to submit their nominations in one of the following five categories:

- A Trailblazer: a woman who utilizes opportunities to customize a new career path at Yale.
- A Quiet Heroine: a woman who has mentored and/or nurtured others at Yale.
- A Visionary: a woman who has been a champion for change at the University.
- A Community Catalyst: a woman who leads in a volunteer capacity at Yale or through a Yale initiative.
- A Work Life Champion: a woman who takes unusual or extraordinary measures to balance work and family.

For more information about the WWN Recognition Award, please visit: <http://wnn.yale.edu/wnn-recognition-award>.

To access the Nomination Form, please visit: <http://wnn.yale.edu/wnn-recognition-award-nomination-form>.

Announcements

For further information on any of the items included here or if you would like to contribute to the next newsletter, send email to [Daphne Klemme](mailto:Daphne.Klemme).

[Please click here for updates on the Yale Science Building, including a new logistics plan](#). The project encompasses the construction of a new state of the art sciences laboratory at the approximate location of the demolished J.W. Gibbs building, a comprehensive renovation of the KBT Plaza, a lecture hall, and a common area at the south end of KBT Plaza.

Yale Benefits Annual Enrollment!

Now through December 14 is the time for you to elect your medical, dental, and vision benefits for next year. During this time you also have the opportunity to enroll (or re-enroll) in health care and dependent care Flexible Spending Accounts.

If you take no action, your benefits will remain the same for 2019, except for Flexible Spending Accounts. You must enroll (or re-enroll) in Flexible Spending Accounts every year. Please note: Deadline for flexible spending enrollment is **December 14, 2018**.

Learn More and Enroll

To learn more and enroll, visit [It's Your Yale – Enroll](#). Then click Enroll Now, which takes you to Workday. Once in Workday, click on your Inbox icon in the upper right-hand corner and choose the Open Enrollment task to start your enrollment.

Tuition Reimbursement Claims

Remember to submit claims for tuition reimbursement now through December 14.

Yale Health, Yale’s flagship plan, is a not-for-profit, physician-led health insurance option exclusively for members of the Yale community. Located in a state-of-the-art medical center on campus, Yale Health offers a wide variety of health care services on-site including primary care, specialty care, 24/7 acute care, radiology, lab, and pharmacy. When your condition requires more specialized care or hospitalization, there’s an extensive network of specialists drawn largely from the faculty of Yale School of Medicine. With Yale Health, emergency care is covered anywhere in the world.

If you have any questions regarding your benefits, please contact an Employee Services representative by phone at **203-432-5552** or by email at employee.services@yale.edu.

[Enroll now](#)

Yale Postdoctoral Office – Update to Parental Leave Policy

The university has updated the parental leave policy for postdocs. Previously a postdoc needed to attest that s/he were the primary caregiver and that the spouse worked at least ½ time during the leave. Under the new policy, a postdoc “must assume significant and sustained responsibility for the care of the child and is expected to be the caregiver at least half-time during normal working hours throughout the leave.” There is no employment requirement for the spouse. If both parents are postdocs, they may each go out on leave and could do so simultaneously if requested. The full policy is described at <https://postdocs.yale.edu/policies/policies-postdoctoral-appointments/benefits-25-leaves> .

Flu Shot Information

Flu Shot Clinics

Flu shots are free for all Yale staff, faculty, students, seniors and Yale Health members.

Adults and children over 5 years of age can go to any of the flu clinics. Children 6 months through 4 years can ONLY go to the flu clinics offered at the Yale Health Pediatrics Department. Children under 18 years old must be accompanied by an adult.

High dose flu vaccine is available at all of the flu clinics except the ones at the Yale Health Pediatrics Department.

Date	Time	Location	Ages
Sat., Dec. 1	9am to 1pm	Yale Health Pediatrics, 3rd Floor	6 months and older

*On these dates Flu FIT home-based colon cancer screening kits will be available for eligible adults with a Yale Health primary care provider.