

# Yale Department of Physics

Yale Physics Newsletter

November 21, 2018

## Hints & Tips!

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

Have a happy and safe Thanksgiving break. If you are traveling, stay safe! [Click here for help with turkey preparations.](#)

## News

Congratulations to **Clarke Smith** on the successful defense of his dissertation “Design of Protected Superconducting Qubits”! His thesis advisor was Michel Devoret.

Congratulations to **Lucie Tvrznikova** on the successful defense of her dissertation “Sub-GeV dark matter searches and electric field studies for the LUX and LZ experiments”! Her thesis advisor was Daniel McKinsey.

## 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:

## 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, November 26

3:30pm in Sloane Physics Lab 57. Physics Club Talk. Neelima Sehgal, Stonybrook, "Measuring Gravitational Lensing of the CMB to Probe Neutrino Mass, Dark Energy, Dark Matter, and Primordial Gravitational Waves". Host: Reina Maruyama. Tea after the talk outside SPL 57.

### Tuesday, November 27

1:00pm in Sloane Physics Lab 52. Special Condensed Matter Theory Seminar. Vladyslav Kozlii, MIT, "Title TBA".

2:30pm in Watson Center A-51. Yale Astronomy Post-Doctoral Fellows Seminar. Dr. Rachael Roettenbacher, Yale University, "Imaging and Surveying Spotted Stars".

4:00pm in Sloane Physics Lab 52. Special Particle Theory Seminar. Sridip Pal, University of California, San Diego, "Analytical Modular bootstrap, OPE coefficients and Black Holes". Host: Witold Skiba.

### Wednesday, November 28

2:30pm in Mason Lab 107. Department of Mechanical Engineering and Materials Science Seminar. Tom Daniel, University of Washington, "A Swell Idea: Mechanical and Molecular Views of Muscle's Radial Motions and Flows". Host: Madhu Venkadesan.

3:00pm in Leet Oliver Memorial Hall 215. Department of Mathematics Colloquium. Daniel Persson, Chalmers University of Technology, "The dark side of the moon: new connections in geometry, number theory and physics".

4:00pm in Sterling Chemistry Lab 160. Molecular, Cellular and Developmental Biology Seminar. Anjon Audhya, University of Wisconsin, "Escrt Dynamics in Membrane Remodeling". Host: Shirin Bahmanyar.

4:15pm in Leet Oliver Memorial Hall 215. Department of Mathematics Colloquium. Axel Kleinschmidt, Max Planck Institute of Gravitational Physics, Albert Einstein Institute, "String scattering amplitudes and automorphic forms".

### Thursday, November 29

1:00pm in Sloane Physics Lab 52. Condensed Matter Theory Seminar. D.K. Efimkin, University of Texas, "Exciton-polarons in doped semiconductors.

2:30pm in Watson Center A-51. Yale Astronomy & Astrophysics Colloquium. Lucianne Walkowicz, Adler Planetarium, Chicago, "Becoming interplanetary: Grappling with the Human Side of Mars Exploration.

4:00pm in Sloane Physics Lab 52. Special Particle Theory Seminar. David Sutherland, University of California, Santa Barbara, "Hidden patterns in the Standard Model Effective Field Theory". Host: Witek Skiba

Friday, November 30

8:30am in Sterling Memorial Library Lecture Hall. Yale Day of Data: Data on Earth. Keynote speaker: William Michener, Principal Investigator of DataONE, Professor and Director of e-Science Initiatives, University Libraries, University of New Mexico. [Click here to register](#). [Click here for more information](#).

4:00pm in Kline Geology Lab 123. Geology & Geophysics Colloquium. Simon Poulton, University of Leeds, "Title TBA".

4:00pm in Sterling Chemistry Laboratory 160. PEB Student-Invited Distinguished Speaker. Prof. Rommie Amaro, University of California, San Diego, "Multiscale Dynamics: Molecules to Cells".

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

- 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](#).

[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.

Pierson-Sage Parking Garage News

This is an update on the situation at the Pierson Sage Garage.

The long running major repair project continues to make progress but will not be complete this fall. The latest estimate has the project going into winter break. Aside from that general time frame, there aren't any more specifics.

Starting on Wednesday, November 7th, the upper level entry AND exit lanes will be closed to deal with more

holes in the concrete. This work will take approximately one month as the cement requires sufficient cure time.

We are getting keypads installed at the lower level to maintain visitor parking which is important to departments.

We are also pushing to get an exit lane opened in lot 16 to expedite exiting the lot. We are fully aware of the inconvenience this causes, but we are at the mercy of the repair project.

Parking in lot 16 is not an option. Vehicles with Pierson Sage assignment parked in lot 16 are subject to tow without notice. Towing is not pleasant for anyone thus we ask that everyone please park in their designated location.

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
Tues., Nov. 27*	2pm to 7pm	Yale Health Center, 1st Floor	5 years and older
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.

Yale Travel Management

TSA PreCheck enrollment event - December 11 & 12, 2018

Yale Travel is pleased to offer TSA Pre✓® onsite enrollments\* at the university on December 11-12, 2018.

TSA Pre✓® is an expedited screening program that enables identified low-risk air travelers to enjoy a smart and efficient screening experience. TSA Pre✓® travelers, do not need to remove shoes, 3-1-1 liquids, laptops, light outerwear or belts. Today, TSA Pre✓® has more than 450 lanes at over 200 U.S. airports.

The TSA Pre✓® application program allows U.S. citizens and lawful permanent residents to directly apply for TSA Pre✓®. Once approved, travelers will receive a "Known Traveler Number" (which needs to be added to a travelers airline profile and reservations) and will have the opportunity to utilize TSA Pre✓® lanes at select security

checkpoints when flying on the [50 carriers](#) that currently participate in TSA Pre✓®.

To participate in this local enrollment event, follow these steps to pre-enroll:

1. [Click here](#) to access the application page
2. Click “Start Application Now,” then click “New Enrollment”
3. Fill out all the steps and choose “Next” at the bottom of each screen
4. Type in your location or Location Code (SP-YALE) at Zipcode/City/Airport Code box – search
5. Choose location “221 Whitney Ave” and click “Next”
6. Select your desired appointment time.  
(Please be sure to make note of your appointment time, no reminders will be sent out.)

**IMPORTANT:**

- To complete the application process, you will need to bring documentation proving ***identity and citizenship status***.
- If you have a valid **U.S. passport**, that is all you need for ID!
- You will finish the process onsite by providing your fingerprints for a background check.
- The **application fee is \$85\* for a 5-year enrollment** and can be paid by **personal** credit card, money order, or certified/cashier’s check. **Cash and personal checks are not accepted.**
- This event is also open to family members of Yale faculty and staff.

**\*This expense is not reimbursable by Yale Travel Management. Department paid exceptions must be approved by your Business Office/Controller’s Office.**

For questions, please contact [travel@yale.edu](mailto:travel@yale.edu).

# Seminars

## Monday, November 26

4:15pm in Dunham Lab 220. Department of Statistics & Data Science Seminar. Axel Munk, University of Goettingen, “Nanostatistics”.

## Tuesday, November 27

12:00pm in Wright Lab 216. Dark Matter Discussion Group. Tracy Slatyer, MIT, “Title TBA”.

1:00pm in Sloane Physics Lab 52. Special Condensed Matter Theory Seminar. Vladyslav Kozlii, MIT, “Nematic superconductivity”.

## Wednesday, November 28

3:30pm in Sloane Physics Lab 57. Alison Sweeney, University of Pennsylvania, “Title TBA”. Host: Paul Tipton. Tea after the talk outside SPL 57.

## Thursday, November 29

4:00pm in Sterling Chemistry Lab 110. Department of Chemistry 2018 Treat B. Johnson Lecture in Organic Chemistry and Chemical Biology. Rolf Mueller, Helmholtz-Institute for Pharmaceutical Research Saarland (HIPS), “Discovery and Development of Antibiotics from (Myxo)Bacterial Secondary Metabolites”.

## Friday, November 30

12:00pm in Becton Seminar Room. Yale Institute for Nanoscience and Quantum Engineering Seminar. Professor W. Mark Saltzman, Department of Biomedical and Dermatology, Yale University, “Bioadhesive Nanoparticles for Protection and Treatment of Human Skin” and Qiushi Guo, Department of Electrical Engineering, Yale University, “Room Temperature Mid-Infrared Light Detection Based on Graphene Plasmons”. Host: Corey O’Hern. Light lunch will be served.

Please feel free to email me at [daphne.klemme@yale.edu](mailto:daphne.klemme@yale.edu) for further information or with any contributions to the next issue.

Thank you,  
Daphne