

Yale Physics Newsletter

For further information on any of the items included here or if you would like to contribute to the next newsletter, send email to <u>Daphne Klemme</u>.

Hints & Tips!

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

Auto-Approval of PO Requisitions Under \$200 with Yale-Designated Funds Only

The PO Requisition business process financial approval workflow will become automatic (self-approved) under the following conditions:

- Under \$200 total for Requisition
- All COA lines charged only to Yale Designated funds
- FD11 is not used
- All suppliers except "Yale Purchasing Services"

Purchase Order Information

Please make sure all quotes show the correct bill to address.

All invoices need to be emailed directly to:

<u>ap.vendorinvoices@yale.edu</u> and must have the PO# on it.

The mailing address should be:

Accounts Payable P.O. Box 208228 New Haven, CT 06520-8228 USA

Most companies do their billing off the quote and invoices get lost, so we are asking, before the PO is sent out, that any quote has the correct information.

Climate and Diversity Committee News

A Note from the <u>Climate and Diversity Committee</u> (CDC).

Good luck to all on your exams!

April 26, 2019

Save the Date

Be prepared! Exam week starts Thursday, May 2, 2019 at 7:00pm and ends after the 2:00pm exam on Wednesday, May 8, 2019.

Seminars

Monday, April 29

- 10:00am in Yale Quantum Institute Seminar Room. Dissertation Defense. Stefan Krastanov, Yale University, "New Approaches to Control, Calibration, and Optimization of Quantum Hardware". Thesis Advisor: Liang Jiang.
- 1:00pm in Watson A53. Yale Astronomy & Astrophysics Event. Senior Research Presentations. Sophia Sanchez-Maes, Osase Omoruyi, Stephanie Spear, and Katie Melbourne, Yale University.
- 3:30pm in Sloane Physics Lab 59. Leigh Page Prize Lectures. Raymond E. Goldstein, University of Cambridge, "Stirring Tails of Evolution". Host: Paul Tipton. Tea after the talk in the 3rd Floor Lounge of Sloane Physics Lab.
- 4:00pm in Bass 305. Molecular Biophysics & Biochemistry Seminar. William Sullivan, University of California, Santa Cruz, "Wolbachia, Big Sur and African River Blindness. Host: Mark Hochstrasser. Tea at 3:45pm

Tuesday, April 30

- 12:00pm in Wright Lab-Connector 245. WIDG Seminar. Lin Wang, Yale University, "Bimodial Electron Gun R&D".
 Lunch will be served outside of Wright Lab-Connector 245 beginning at 11:45am. <u>RSVP required</u>.
- 3:30pm in Sloane Physics Lab 59. Leigh Page Prize Lectures. Raymond E. Goldstein, University of Cambridge,
 "Individual and Collective Dynamics of Active Matter". Host: Paul Tipton. Tea after the talk in the 3rd Floor Lounge of Sloane Physics Lab.

Wednesday, May 1

- 12:30pm in Wright Lab 216. YPPDO Seminar. Michael A. Choma, Yale University, "Career lessons – from academia to industry". Please bring your own lunch.
- 2:00pm in Wright Lab 216. Wright Lab Workshop. Introduction to Scientific Computing. <u>RSVP requested</u>. Contact Tom Langford at <u>thomas.langford@yale.edu</u> with any questions.
- 3:30pm in Sloane Physics Lab 59. Leigh Page Prize Lectures.
 Raymond E. Goldstein, University of Cambridge, "Upside-Down and Inside-Out: Biomechanics of Cell Sheet Folding".
 Host: Paul Tipton. Tea after the talk in the 3rd Floor Lounge of Sloane Physics Lab.
- 3:30pm in Dunham Lab 220. Department of Mathematics Colloquium. Mark Tygert, Facebook Research, "Machine Learning at Facebook". Joint colloquium with computer science.

4:00pm in Sterling Chemistry Lab 160. The Department of Molecular, Cellular and Developmental Biology Seminar. Lillian Fritz-Laylin, UMass, Amherst, "Our evolving view of cell motility". Host: Tom Pollard. Tea at 3:45pm.

Thursday, May 2

10:00am in Yale Quantum Institute Seminar Room. Yale Science and Engineering Forum. Topics Include: Climate and Environment, Quantum Science, and Biology: Macro to Micro. <u>Click here for further information</u>.

1:00pm in Wright Lab-Connector 245. Nuclear Particle Astrophysics (NPA) Seminar. Agnes Mocsy, Yale/Pratt, "Physics in Concert with The Arts". <u>RSVP required</u>.

Friday, May 3

- 12:00pm in Yale Quantum Institute Seminar Room. YaleQuantum Institute Seminar. Sabre Kais, Purdue University,"Quantum Computing for Complex Chemical Systems".Host: Victor Batista. Lunch will be provided.
- 4:30pm in Sterling Chemistry Laboratory 110. Department of Chemistry. Biophysics Training Grant Invited Speaker. Dr. Bridget Carragher, New York Structural Biology Center, National Institutes of Health, "CryoEM: Personal Reflections and Some Musings About the Future".

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

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

News

Congratulations to **Prashanta Kharel** on the successful defense of his dissertation entitled "Utilizing Brillouin Interactions for Optical Control of Bulk Acoustic Waves"! Thesis Advisor: Peter Rakich.

Shany Danieli (Graduate Student with Pieter van Dokkum) did an interview on the Event Horizon Show on her research "Do Galaxies with No Dark Matter Prove it Exists?"

Click here to see the interview.

Jack Harris (Professor of Physics) research is featured in Yale News (April 18, 2019), "New experiment dives into quantum physics in a liquid".

For the first time, Yale physicists have directly observed quantum behavior in the vibrations of a liquid body.

A great deal of ongoing research is currently devoted to discovering and exploiting quantum effects in the motion of macroscopic objects made of solids and gases. This new experiment opens a potentially rich area of further study into the way quantum principles work on liquid bodies.

Click here for full story

Sheridan Green (Graduate Student with Daisuke Nagai) has been awarded a 2019 NSF Graduate Research Fellowship.

From the National Science Foundation Graduate Research Fellowship Program (GRFP) website: "The Fellowship provides financial support for three years, over a five-year fellowship period or when you graduate (whichever is first). The Fellowship provides a stipend per twelve-month Fellowship Year which will be disbursed in monthly to you by your graduate institution. The stipend cannot be prorated or divided into smaller increments. Your institution will receive a Cost of Education Allowance in lieu of all required tuition and fees for each of the three years you choose to utilize the fellowship funding. The use of the Cost of Education Allowance is determined by your graduate institution."

Congratulations on this honor!

Click here for further information

Jared Rovny (Graduate Student with Sean Barrett) has been named the receipent of the 2019 D. Allan Bromley Graduate Fellowship in Physics

It is a great pleasure to announce that Jared Rovny is the recipient of the 2018-2019 D. Allan Bromley Graduate Fellowship in Physics.

The Fellowship is awarded annually to a graduate student in Physics who has advanced to candidacy in the Ph.D. program, particularly those "who exhibit a broader interest than just physics, including, but not limited to, science and public policy, engineering, and applied science." Candidates are nominated by the Physics faculty and selected by the D. Allan Bromley Professor of Physics (John Harris) and the Director of Graduate Studies (Fall term Nikhil Padmanabhan). The indenture goes on to say, "In this way, the recipients will reflect and celebrate Dr. Bromley's distinguished and honorable persona in the exceptional scope, standing, talent, and character of his distinguished personal, public, and academic life."

Jared Rovny is a sixth year graduate student in the research group of Sean Barrett in the Physics Department. His thesis research covers a broad range of topics in experimental condensed matter physics. He was the first author on two papers that reported the first evidence for Discrete Time Crystal Signatures in a clean, dipolar solid (a real spatial crystal). He coauthored a paper submitted on the group's Difference Map method (DiffMap) to accelerate 2D NMR experiments, and he is the first author on a submitted paper that extends this method. His talk at the 2015 ENC Conference was part of a special Prize Student Symposium at that meeting.

In addition to his research accomplishments, Jared excels at improving physics education and academic life for others. He won the Yale College Prize Teaching Fellowship, for his work in PHYS 171 (University Physics for the Life Sciences), considered to be among the most important honors that Yale bestows upon its graduate students. Jared became a McDougal Graduate Teaching Center (MGTC) Fellow, for the Poorvu Center for Teaching and Learning in 2015, helping to lead the Physics Departmental workshop on the "Fundamentals of Teaching Physics." He helped design and lead a large "Teaching at Yale" event, with over 200 participants, ran orientations in other departments, offered teaching consultations to other teaching fellows, and helped support the work of many other MGTC fellows. He helped to develop the online course, "Movie Physics" and was in charge of half of the online lectures. He later co-presented details at a Yale Educational Technology Symposium. Jared also served as the Program Overseer for the "Online Experiences for Yale Scholars" and managed a team of undergraduate coaches as science mentors for incoming Yale College students. He prepared and offered a series of recorded lectures about physics for the MCAT in 2016, and has served as a volunteer for the Yale Physics Olympics.

As is often the case, this year's selection committee faced a very difficult choice because a number of very high-quality nominations were received. Please join me in congratulating Jared on this great accomplishment.

Sincerely, Paul

Self-Install Software and Patches Available for Selected Yale Devices

April 18, 2019

As part of a continuing effort to achieve operational excellence by enabling the community to access software with greater efficiency, the tools we use to manage Yale computers were enhanced at the end of last year. One key benefit of the enhancement is individuals who use ITS managed systems no longer need to contact an IT support provider to install published applications to these devices.

Is my computer eligible to use this feature?

Eligible computers include Managed Workstations, as well as all Yale-owned devices managed via Microsoft System Center Configuration Manager (SCCM) or Parallels Mac Management (PMM). <u>View instructions</u> how to determine if you have this software installed.

How do I install this new software using this new delivery feature?

- Windows operating systems: Navigate to the search area found near the Windows logo, and search for 'Software Center.' The computer management application, Software Center for Windows operating systems, will display a list of published software you can install at will.
- MacOS: Navigate to the Applications folder, and launch the 'Parallels Application Portal.' The computer management application, Parallels Application Portal for MacOS, will display a list of published software you can install *at will*.

For further assistance, <u>view step-by-step software self-install instructions with images</u>.

Additional benefits

The number of software titles available through these tools continues to grow. Security patches and software updates are also available prior to a deadline, which varies depending on the urgency of the update. You can choose to install patches and updates when it is most convenient rather than waiting through an update at an inconvenient time. On computers running the Windows operating system, you can also <u>set your</u> <u>'business hours'</u> so any patching activity does not occur during your working hours. This option is not available for computers running MacOS.

These tools do not replace the <u>Software</u> <u>Library</u> available through the <u>IT Service Portal website</u>.

Announcements

<u>Please click here for updates on the Yale Science</u> <u>Building, including a new logistics plan</u>. 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.