

Yale Department of Physics

Yale Physics Newsletter

March 23, 2018

News

Congratulations to **David Meltzer** on his successful defense of his thesis “Topics in the Analytic Bootstrap”! His thesis advisor was David Poland.

§

Marief Pettee (Graduate Student) has been awarded a Women's Faculty Forum Seed Grant, which supports the diverse work of faculty and student scholars at Yale with the goal of fostering gender equity and discussions of representation and appropriation more broadly. Her project, entitled "Machine Woman," will result in a short experiential documentary film following her process of generating choreography using machine learning techniques on 3D motion capture data.

§

“**From the Library**” - IOP’s eBook Release 4 is now available to Yale users at <http://iopscience.iop.org/bookList/10/1>

The collection includes the IOP Expanding Physics; IOP Concise Physics; Physics World Discovery; and AAS-IOP Astronomy collections. Each work is available in PDF, ePub, Kindle, or HTML format. They all have library catalog records.

- The AAS-IOP collection is new, and there have been presentations on this professional society collaboration for the past few years at the Special Libraries Association annual conference. Most titles are still forthcoming, but as of March 19th, two are available for reading.
- IOP Expanding Physics consists of full-length works in physics and related disciplines.
- Concise Physics consists of shorter texts “in rapidly-advancing areas” of physics. They’re about novella or “longread” length.
- Physics World Discovery consists of shorter starting point works on a variety of physics topics. These are shorter than Concise Physics — most are under 40 PDF pages.

Questions or feedback can be sent to Kayleigh Bohémier (your librarian) at kayleigh.bohemier@yale.edu.

Save the Date

Please be on the lookout for prospective graduate students visiting during the Graduate Admissions Open House April 6-7, 2018. Also note that the Vernon Hughes Memorial Lecture is scheduled for April 9, 2018 and the Leigh Page Prize Lectures are April 23-34, 2018.

Seminars

Monday, March 26 Physics Club. Mehran Kardar, MIT, “Pressure and force from non-equilibrium fluctuations in QED and Active Matter”, SPL 57 at 3:30pm. Host: Benjamin Machta. Tea after the talk in SPL 3rd Floor Lounge.

Tuesday, March 27 Weak Interaction Discussion Group (WIDG) talk. Stefan Krastanov, Yale University, "Hobby Electronics for Outreach and Research", WLC-245 at 12:00pm. Lunch will be served starting at 11:45 am outside WLC-245. [RSVP required for the lunch.](#)

Tuesday, March 27 AMO Seminar. Mehdi Namazi, Stony Brook University, “Building a scalable quantum network of room temperature quantum devices”, SPL 52 at 2:00pm. Host: Jack Harris.

Tuesday, March 27 Particle Theory Seminar. Norman Christ, Columbia, “Sensitive tests of the standard model from K mesons and lattice QCD”, SPL 52 at 4:00pm.

Tuesday, March 27 Molecular Biophysics & Biochemistry Seminar. Maryn McKenna, Author, “Farming, antibiotics and the future of meat”, LC 102 at 4:00pm.

Wednesday, March 28 Center for Research on Interface Structures and Phenomena Seminar. Rebecca Quardokus, University of Connecticut, “Engineering and reliability of mixed self-assembled monolayers and two-dimensional polymers for use in next-generation electronics”, BCT 227 at 11:00am. Host: Udo Schwarz.

Wednesday, March 28 Department of Mechanical Engineering and Materials Science Seminar. Derek Stein, Brown University, “Towards Single Molecule Protein Sequencing”, ML 107 at 2:30pm. Host: Juan de la Mora.

Wednesday, March 28 Department of Molecular, Cellular and Developmental Biology Seminar. Matt Kaerberlein, University of Washington, “Translational geroscience: A new paradigm for 21st century medicine”, SCL 160 at 4:00pm. Host: Murat Acar. Tea before the talk at 3:45pm.

Wednesday, March 28 Department of Geology & Geophysics Colloquium. Ian Garrick-Bethell, University of California, Santa Cruz, “Title TBA”, KGL 123 at 4:00pm.

Wednesday, March 28 Department of Chemistry Lecture in Theoretical Chemistry. Professor Sereina Riniker, ETH Zurich, “Calculating Relative Binding Free Energies with Replica-Exchange Enveloping Distribution Sampling”, SCL 111 at 4:00pm.

Wednesday, March 28 Department of Mathematics Colloquium. Simion Filip, Harvard University, "Discrete groups, Lyapunov exponents, and Hodge theory", LOM 215 at 4:15pm.

Thursday, March 29 Department of Astronomy Colloquium. Evan Kirby, Caltech, "Nucleosynthesis in Degenerate Objects", WTS A-51 at 2:30pm.

Thursday, March 29 Sackler/PEB Invited Speaker. Prof. Sam Walcott, University of California, Davis, "Using molecular mechanics to predict large-scale biological function: Applications to muscle activation and intracellular transport", SPL 63 at 4:00pm. Refreshments at 3:45pm.

Thursday, March 29 Department of Chemistry Lecture in Organic Chemistry. Professor M. Kevin Brown, Indiana University, Bloomington, "Metal Catalyzed Alkene Functionalization: An Approach Towards Stereospecific Cross Coupling", SCL 160 at 4:00pm.

Thursday, March 29 Yale Quantum Institute Presents. Dante Lauretta, Astronomer, "OSIRIS Rex and the XTRONAUT: Live space exploration through board games", LC 101 at 7:30pm.

Friday, March 30 Yale Energy Science Institute & Microbial Sciences Institute Seminar. Xinglong Ren, University of Minnesota, "Exploring Electrical Transport Mechanisms in Single Crystal Organic Semiconductors", 810 West Campus Drive Main Conference Room, E130 at 10:30am. Coffee and cookies will be provided.

Friday, March 30 Center for Teaching & Learning STEM Education Seminar. Dr. Megan Wawro, Virginia Tech, "Student Reasoning about Linear Algebra in Quantum Physics", SPL 56 at 11:00am. Please join a lunch discussion immediately following this seminar.

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

Yale Environmental Health & Safety News - Minors and Visiting Undergraduates.

The Office of Environmental Health and Safety recently implemented upgrades to the online application for minors and visiting undergraduate students participating in research or clinical activities. These upgrades include a new series of automated notifications that will be sent via email to the Principal Investigator, the application requestor and the minor or visiting undergraduate student's responsible supervisor. The notifications will alert you of the application's status and any actions you may need to take in order to get the application authorized.

Applications for minors and visiting undergraduates participating in research or clinical activities must be submitted through EHS Integrator at <https://ehsis.yale.edu/EHSIntegrator/Registration>. An [instructional help guide](#) is also available to assist you with getting started. This application process integrates EHS, IACUC, HIPAA and HRPP approvals into one system and allows the submission of multiple minors or visiting undergraduates all on one form. Its functionality makes it easier to track progress, review outstanding issues and ensure that training and other compliance matters are completed.

Applications must be submitted and approved prior to the individual's arrival and participation in any research or clinical activities. Applications will not be authorized until all training and laboratory compliance issues have been completed.

Request NetIDs through Sponsored Identity

Adding the person in Integrator does not give them a NetID. [Click here](#) to request a NetID through Yale's Sponsored Identity System.

From the "Create Sponsored Identity" list choose "Minor Student Research/Clinical" for minors or choose "Visiting Undergrad Research/ Clinical" for visiting undergraduates.

To submit a request for a NetID, you will need the student's name, home address, birthdate and department name or organization number.

Read the Revised Policies

- [Minors Participating in Research or Clinical Activities Policy](#)
- [Visiting Undergraduates Participating in Research or Clinical Activities Policy](#)

Need Assistance?

Please see the [Frequently Asked Questions](#) for more information. For assistance with completing or gaining access to the online application or if you have any questions or concerns regarding minors and visiting undergraduates participating in research or clinical activities, please email ehs@yale.edu.

[Click here for the full Environmental Health & Safety Issue for March 2018.](#)

For more news please see <http://physics.yale.edu/news>
[Announcements](#)

Physics Intramural Soccer! Games start in early April! If you are interested please contact Joseph Sullivan (Graduate Student) at joseph.m.sullivan@yale.edu.

§

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.