

Yale Department of Physics

Yale Physics Newsletter

July 27, 2018

News

Wright Laboratory and the Physics Department at Yale University are hosting a symposium in celebration of the career of Professor Francesco Iachello, titled SYMMETRIES AND ORDER: Algebraic Methods in Many Body Systems. The two-day symposium will consist of talks and conversations on topics to which Professor Iachello made significant contributions, spanning the fields broadly categorized as Nuclear Structure, Molecular and Hadronic Structure, Neutrino Physics and Double Beta Decay, and Symmetries and Phase Transitions. There will be ample opportunity to discuss and catch up with your friends and colleagues.

SYMMETRIES AND ORDER: Algebraic Methods in Many Body Systems

Date: October 5-6, 2018 (Friday - Saturday)

Location: Sloan Physics Laboratory, Yale University, New Haven, CT

Conference website:

<https://sites.google.com/yale.edu/symmetriesandorder>

Registration:

Please register via the [registration form](#) to let us know whether you will be attending. The registration deadline is Sept. 4. If you have already let us know you will be attending, there is no need to register again, although do let us know if you have dietary restrictions or any other requests. We will update the [list of participants](#) periodically.

Travel & Lodging:

Please find details on the [conference website under "Location"](#). We have blocked rooms at the New Haven Hotel and Omni and list several hotel recommendations on the page. The rooms are held until September 4, 2018.

Registration & Hotel Deadline: September 4, 2018:

For assistance, please email symmetries@yale.edu or contact Cathy Barabas at +1 (203) 432-6914.

Organizers:

Reina Maruyama (Yale), Mark Caprio (University of Notre Dame), Roelof Bijker (UNAM), Baha Balantekin (University of Wisconsin)

Local Organizing Committee:

Save the Date

Fall term classes start on August 29, 2018. **Please note that Monday classes will meet on Friday, August 31, 2018 due to the Labor Day Holiday.**

Seminars

Monday, July 30 2018 Wright Lab Undergraduate Summer Research Presentations, Room WL 216 at 11:00a-12:30p (with pizza lunch – [RSVP](#)).

- Ryan Montesi and Alex Latham (Baltay) - Calibration of Type Ia Supernova Photometry
- Cady van Assendelft (Lamoreaux/Maruyama) - Development of Phase II of HAYSTAC
- Alec Emser (Moore) - Measuring the Blackbody Spectrum of a Levitated Microsphere
- Ava Polzin (Newburgh) - Examining Drone Calibrations for HIRAX
- Josh Purtell (RHIG) - Using Machine Learning Techniques to Identify Heavy Jets

Wednesday, August 1 2018 Wright Lab Undergraduate Summer Research Presentation, Room WL 216 at 9:30a-11:00a.

- Krish Desai (Newburgh) - Digital Noise Source Development
- Robert Howard (Baltay) - Using SNID to calibrate the WFIRST spectrometer
- Charlotte Kavalier (Moore) - Electron Drift in Liquid Xenon
- George Halal (RHIG) - Machine Learning for Heavy Flavor Jet Tagging
- Lukas Baker (Heeger) - Towards a Precise Measurement of the PROSPECT Scintillator Response with TACO
- Shoumik Chowdhury (Moore) - Using microfluidics for the controlled delivery of single microspheres into an optical trap

Friday, August 3 Wright Laboratory NPA Seminar. Laura Brittany Havener, Columbia University, "Jet Quenching in Relativistic Heavy Ion Collisions with the ATLAS Detector", WL 216 at 11:00am. Lunch in WLC 245 following seminar. [RSVP required](#).

Friday, August 24 Graduate Student Orientation, SPL 3rd Floor Lounge at 9:00am. Host: Sandra Tranquilli.

Thursday, August 30 Qualifying Exam, Part 1 (9:00am-11:30am) and Part 2 (2:00pm-4:30pm) in SPL 57.

Friday, August 31 Qualifying Exam, Part 3 (9:00am-11:30am) and Part 4 (2:00pm-4:30pm) in SPL 57.

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

Helen Caines, Rick Casten, Bonnie Fleming, John Harris, Karsten Heeger, Reina Maruyama, David Moore

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Summer Research in Physics!

Cady van Assendelft (YC'2019 Physics (Intensive) Major)

Summer Research: I'm working on the HAYSTAC collaboration at Wright Lab this summer, helping to upgrade the experiment for Phase II. I've especially enjoyed working on the hardware components and spending time in the machine shop. I also had the opportunity to present on HAYSTAC while attending the Dark Matter Summer School held at University at Albany, SUNY last week.

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Wright Lab will host three regular seminars and two new discussion groups in 2018-19: NPA, WIDG, YPPDO, DMDG and Instrumentation Lunch.

For descriptions of each of the series, more information, and upcoming events [please see the attached flyer](#) or <https://wlab.yale.edu/seminars>

We invite suggestions for speakers and topics; please send them and any questions for the seminar organizers to wlab-seminars@mailman.yale.edu or to the individual contacts for each series as listed on the attached flyer.

Center for Teaching and Learning - Fall 2018 Yale Scientific Teaching Course for Graduate Students & Postdocs

WEDNESDAYS

9 a.m. - 11 a.m.

301 York Street

The CTL invites Yale University graduate students and postdocs to apply for the semester-long course, **B&BS 879: Theory and Practice of Scientific Teaching for Life Scientists**.

The goal of this course is to improve undergraduate science education by training a new generation of scientific teachers to bring the spirit and rigor of research into the undergraduate classroom. Participants in the course will learn evidence-based teaching strategies, including:

- engaging students through active learning
- incorporating inclusive teaching practices
- developing effective assessments

Participants will then apply the knowledge they have learned to developing teaching materials for dissemination to the larger scientific teaching community. The Fall 2018 instructor is Dr. Elizabeth Morse Luoma, STEM Education Program Director at the CTL. Applications are due Wednesday, August 15. Classes will begin on Wednesday, August 29.

[Learn More & Apply](#)

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University Registrar's Office News - 2018-2019 Course Information Now Available in Yale Course Search

2018-2019 course information is now available for viewing in Yale Course Search (YCS). [Yale Course Search](#) is now the exclusive online application for viewing course information, replacing the Online Course Information (OCI) and Yale Blue Book (YBB) systems. YCS has been implemented as a more user friendly application for searching courses, which includes a responsive design and an easier user interface. For

more information about YCS, including helpful tutorials and FAQs, see the [Yale Course Search Resources webpage](#). The features of YCS allow you to perform similar functions as you did in OCI and YBB, such as:

- Search for course information
- Find classroom assignment information when it becomes available
- View final exam information when it becomes available

Coming soon, YCS will be further enhanced to include:

- Historical data going back five years
- The ability to search across all terms
- The ability to link directly to individual courses

For more news please see <http://physics.yale.edu/news>
[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.