

Yale Department of Physics

Yale Physics Newsletter

May 31/June 7, 2019

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).

During the summer months the newsletter will be produced every two weeks.

Hints & Tips!

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

How to Stay Cool During the Summer

During the hot summer months, it can be difficult to stay cool and enjoy yourself, especially if you don't have air conditioning or need to be outside. You can keep cool indoors during the day by blocking out sunlight and avoiding activities that can make your home hotter. When you're outside, you can beat the heat by looking for shade, going to areas with a natural breeze, and wearing the right clothes. [Click here for tips](#).

Climate and Diversity Committee News

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

In March, the AIP released a new report on Women in Physics and Astronomy (<https://www.aip.org/statistics/reports/women-physics-and-astronomy-2019>). Now the semester is over hopefully everyone has more time to browse this interesting article. Their highlighted findings include that while in recent years (2007–2017), the percentage of women earning a bachelor's degree in physics and astronomy has not changed over time, the percentage of women enrolling in physics graduate programs and earning a physics doctorate has continued to rise. In addition, the percentage of faculty members who are women is increasing over time. African-American and Hispanic women remain under-represented in physics and astronomy. However, the number of Hispanic women earning physics and astronomy degrees is growing rapidly over time, while the number of African-American women has not shown similar growth. Finally, gender differences in salary emerge mid-career, 10–15 years after graduating with a physics doctorate, men had 10% higher salaries than women.

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

Yale Summer Sessions, dates are: Summer Session A: May 27-June 28, 2019 and Summer Session B: July 1-August 2, 2019; University Preparations 3-week Program: July 1-19, 2019.

Seminars

Monday, June 3

9:00am-5:00pm in Yale School of Management. Mechanical Engineering and Materials Science. 4th International Conference on Packing Problems. Host: Corey O'Hern. [Click here for more information](#).

Tuesday, June 4

9:00am-5:00pm in Yale School of Management. Mechanical Engineering and Materials Science. 4th International Conference on Packing Problems. Host: Corey O'Hern. [Click here for more information](#).

4:30pm in Sterling Chemistry Lab 160. Department of Chemistry Lecture in Inorganic Chemistry. Prof. Karen Goldberg, University of Pennsylvania, "Molecular Oxygen and Organometallic Chemistry".

Wednesday, June 5

9:00am-5:00pm in Yale School of Management. Mechanical Engineering and Materials Science. 4th International Conference on Packing Problems. Host: Corey O'Hern. [Click here for more information](#).

Thursday, June 6

9:00am-5:00pm in Yale School of Management. Mechanical Engineering and Materials Science. 4th International Conference on Packing Problems. Host: Corey O'Hern. [Click here for more information](#).

12:00pm in Sloane Physics Lab 59. PEB Career Series. Research & Career Paths at NASA. Lynn Rothschild, NASA Ames Research Center, "Are we alone? The search for life in the universe" and Punnathat (Tent) Bordeenithikasem, NASA Jet Propulsion Laboratory, "Bulk metallic glasses for spacecraft applications". Lunch will be served, starting at 11:45am.

Friday, June 7

9:00am-5:00pm in Yale School of Management. Mechanical Engineering and Materials Science. 4th International Conference on Packing Problems. Host: Corey O'Hern. [Click here for more information](#).

12:00pm in YQI Seminar Room. Yale Quantum Institute Colloquium. Norman Birge, Michigan State University, "Spin-triplet supercurrent and controllable phase states in ferromagnetic Josephson junctions". Host: Michel Devoret. Lunch will be provided.

4:00pm in YQI Seminar Room. Yale Quantum Institute Physics Open Mic. Sal Elder, Yale University, "Alternatives to Quantum Mechanics". Organizers: Shruti Puri & Connor Hann.

Friday, June 14

12:00pm in YQI Seminar Room. Yale Quantum Institute Colloquium. Christopher Chamberland, IBM, "Fault-tolerant state preparation of GKP states". Host: Liang Jiang & Kyungjoo Noh. Lunch will be provided.

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

News

Summer is upon us and I need items to keep our Facebook (<http://www.facebook.com/YalePhysicsDept>) page busy. Please send me a photo and brief statement of your summer research projects so that I can post them – it is exciting to see where everyone goes and what they are doing!

Murray Gell-Mann (YC'1948 in Physics) - in Memoriam

Murray Gell-Mann, Caltech's Robert Andrews Millikan Professor of Theoretical Physics, Emeritus, and a winner of the 1969 Nobel Prize in Physics, passed away on May 24, 2019. He was 89 years old. Murray Gell-Mann was a JE Alum and world-renowned physicist who developed key concepts in particle physics.

[Click here for In Memoriam Article from Caltech.](#)

[Click here for article in Physics World.](#)

Physics through the arts

An experimental seminar coopted paintings, poetry, and hip-hop music to teach physics to undergraduate students, who created art projects from the concepts that they learned.

The idea to teach physics through art had been brewing in [Ágnes Mócsy](#)'s mind for years. Mócsy, a theoretical physicist, had just started a visiting professorship at Yale University in New Haven. On the hook to teach, she expected to take the reins of a class on nuclear physics, her specialty. But a flyer from the university's museums and libraries triggered her to consider a new possibility: Why not teach physics using Yale's famous art collection? Receiving the green light last fall, she took a class of 15 first-year students on an [art-filled journey](#) through the cosmic landscape, the particle zoo, and quantum weirdness.

[Click here for full story in APS Physics 12, 60 \(May 28, 2019\)](#)

Announcements

[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.