

UNDERGRADUATE MATH SEMINAR

The next math seminar will be back in its usual location, Bailey 207. The pre-seminar refreshments will still be in the Math Common Room, Bailey 204 and yummy.

DATE: **THURSDAY, September 30**

Time & **12:30 – Refreshments in Bailey 204**

Location: **1:00 – 1:45 Seminar in Bailey 207**



Professor Joy Wang

In this seminar, three Union students, **Josh DaRosa (ME major)**, **Zekai (Kai) Hu (Math major)**, and **Zhebin (Irene) Yin (Math and CS majors)**, all seniors, will describe the research work they did this summer under the guidance of **Professor Joy Wang**.

Title: Come Hear About Student Research!

Abstract: Interested in learning about students' research over the summer / academic year? Josh will present data analysis within PIV fluid dynamics research and PIV measurements of heterogeneous canopies. Zekai (Kai) will present predicting one-year survival rate for heart failure patients and COVID-19 patients with heart disease. Zhebin (Irene) will present classification of lung cancer circulating tumor cells in liquid biopsy using deep learning.

A Change of Guard: Math Department Has a New Chairperson

The math department is pleased to announce that as of July 1, 2021, **Professor Leila Khatami** has assumed the post of chairperson of the department and has moved into the chair's office, Bailey 200A. Please join us in congratulating her on taking on this role.

In addition, we would like to thank and congratulate the outgoing chairperson, **Professor Christina Tønnesen-Friedman**, for doing such a wonderful job steering the department for the last four years. BRAVA!

A Change of Guard, Part 2: Recent Retirements

At the end of each of the last two (COVID impacted) academic years, a long-time and cherished math professor retired: **Professor Kimmo Rosenthal** retired at the end of 2019-20 and **Professor William (Bill) Zwicker** retired at the end of 2020-21. Both Professors Rosenthal and Zwicker worked at the college for over 40 years, teaching thousands of students, writing many influential books and papers, and serving as leaders of the math department, the college, and the mathematical world.

Lest you think they have stopped being busy, Professor Rosenthal has recently started publishing works of fiction in several scholarly outlets as well as serving as a referee of such works. Professor Zwicker is actively pursuing his mathematical research ... in France, with support from a prestigious fellowship.

Thank you Professors Rosenthal and Zwicker for all you have done for Union College. We wish you all the best in your next chapter.

Calculus Help Center – open for business!

The math department runs a Calculus Help Center (CHC) that offers **free, drop-in, tutoring** in calculus courses through Math 117. It is open Sunday through Thursday nights 7:30-10:00pm and is located in the SORUM HOUSE seminar room.

Putnam Exam Preparation

Do you enjoy creative problem solving in math? Do you enjoy proving your mettle by taking on treacherously difficult problems and showing them who the boss is? Do you like throwing your hat into the ring and participating in fun academic competitions.

If you answered YES to the above, join the **Putnam Exam Preparation (PEP) Squad!**

The William Lowell Putnam Mathematical Competition, aka, The Putnam Exam, is an annual contest for undergraduate students across the United States and Canada. Participants in the contest spend 6 hours (in two sittings, a morning session and an afternoon session) trying to solve 12 problems. Problems on the “exam” are generally *quite challenging*, but not specialized. In other words, they are accessible to students who may or may not have taken advanced courses.

Professor Greg Malen will be organizing and working with this year’s PEP squad. If you are interested in participating or in finding out more about the Putnam Exam, please contact him: maleng@union.edu or simply attend the next PEP squad practice session, which will be

Thursday, September 30 in Messa 105

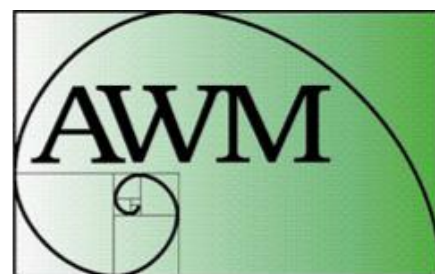
Come join the fun!

AWM Hosting a Meet and Greet Event

The Union College chapter of the Association for Women in Mathematics (AWM) will be hosting a faculty meet-and-greet for students interested in math. The event will be

Friday, October 1, 5:00-7:00pm in the outdoor tent square between Memorial Chapel, Beuth House and Golub House.

This is a great opportunity to learn more about the math department and to make some new friends!



Association for Women in Mathematics

What We Did this Summer

Continuing the series from last week’s newsletter, here is another bullet point highlighting some of the activities of some of the math faculty this past summer.

- **Professor Jue (Joy) Wang** supervised two students doing summer research, one on lung cancer categorization using deep learning and the other on survival prediction of heart failure patients with COVID-19. She submitted a grant proposal on kidney cancer research to the Department of Defense (DoD) - Congressionally Directed Medical Research Programs. She made a final revision on a book chapter, titled "Mathematics for Sustainable Humanity – Population, Climate, Energy, Economy, Policy, and Social Justice" for the Foundations for Undergraduate Research in Mathematics. She was invited to speak at the Data Science for Social and Environmental Justice Summer Writing Group and attended a three-week workshop on Mathematical Sciences in Obesity Research.