UNDERGRADUATE MATH SEMINAR

During each academic term, the Math Department runs an Undergraduate Mathematics Seminar. This fall, Professor Brenda Johnson will be coordinating the seminar, a weekly series of ~45 minute talks about math – current research, famous older problems, interesting topics from fields outside of the standard curriculum, etc. The seminars will be announced in the newsletter, via email, and online on the math department’s website under the Activities tab, or directly at

https://muse.union.edu/mathematics/student-seminar/

This term, the seminar will usually meet during common hours on Thursdays or Fridays in Bailey 207, with a light lunch served in Bailey 204, unless otherwise noted.

The first seminar of the term will be

DATE:  
THURSDAY, September 14

Time & Location:  
12:30 – Refreshments in Bailey 204  
1:00 – 1:45 Seminar in Bailey 207

In this seminar, Union College’s own Professor Brenda Johnson will present the following talk:

TITLE: Counting Sudokus

ABSTRACT:  Sudoku is a popular puzzle involving a 9x9 grid in which one has to arrange the numbers 1 through 9 so that each row, column, and block contains all nine numbers. There are many interesting mathematical questions involving sudoku puzzles. In this talk, we'll focus on a couple of questions related to counting sudokus. After discussing how many possible solutions there are for 9x9 and 4x4 sudokus, we'll look at ways in which one can generate new sudokus from old ones, and whether or not these techniques can be used to generate all sudokus of a given size.

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.
Meet the New Math Faculty

The Math Department is pleased to welcome two new mathematicians, Professors Ehssan Khanmohammadi and Jetjaroen Klangwang to its ranks, and they have both written an article to introduce themselves to the Union math community!

My name is Jetjaroen Klangwang. Most people know me by “Jay”. It is an honor and a privilege to be a part of Union College.

Before moving here, I was mostly on the west coast. I got my Master's degree from the University of Utah in 2011, then I moved to Oregon State University to pursue my Ph.D.

Originally, I am from Thailand. My family lives in a small province called Trang in southern Thailand. Due to the geography, Trang is not only known for having many beautiful islands, but also for having a special celebration during the month of February: Underwater Wedding Ceremony.

My research is in the general area of number theory, with a particular interest in the theory of modular forms. I am especially interested in the location and properties of zeros of modular forms. The theory of modular forms is directly linked with complex analysis, but the theory also arises in many applications such as algebraic topology, representation theory, mathematical physics, combinatorics, and number theory.

My area of expertise sounds intense and I consider myself a workaholic at times. However, I also have a life outside of (math). I enjoy learning the art of paper folding (origami), assembling action figures, binging anime series and being outdoors.

My research specialization is operator algebra theory, a subject with roots in the mathematical foundations of quantum mechanics and in Fourier analysis. I enjoy communicating mathematics at all levels, and I'm looking forward to teaching the many talented students at Union and involving them in research.

I'm also an avid table tennis player, and, hopefully soon, with some other colleagues and students we start a table tennis league at Union, so stay tuned!

I'm very pleased and excited to be joining Union College this year. I grew up in Tehran---a city in Iran that is in many ways comparable to New York City in the US---and I got my bachelor's degree in mathematics from Tehran Polytechnic. As a senior student I had the privilege of doing research at the Institute for Studies in Theoretical Physics and Mathematics (IPM), and, especially because of my own valuable experience at IPM, I'd like to encourage all of our math majors who are thinking about pursuing their studies in graduate school to take advantage of REU's and similar programs. In 2009 I moved to Happy Valley and after earning my PhD in mathematics from Penn State University I joined Franklin & Marshall College where I was for three years.

Union College email accounts of recent graduates expire at the end of September. To continue receiving the Math Newsletter, please update your email address with Joanne Higgins (higginsj@union.edu) or Professor Paul Friedman (friedmap@union.edu).