

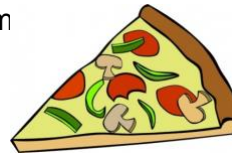
## UNDERGRADUATE MATH SEMINAR

The next math seminar will also be the last one of the academ

**DATE:** THURSDAY, May 25

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

**Location:** 12:50 – 1:45 Seminar in **Bailey 207**



Professor Filip Dul

In this seminar, **Professor Filip Dul** from the Department of Mathematics at **Rutgers University** will present the following talk:

**Title:** *Is Complete Disorder Possible?*

**Abstract:** It is a well-known fact that entropy increases with time (once your cat pushes your favorite mug off the counter, there's no "rewinding time" to get it back). On the other hand, we know from experience that as disorder increases, patterns emerge (think for example of how many constellations you can identify on a clear, starry night). In this talk, we will consider basic examples of how order arises out of apparent disorder by partitioning, or "coloring", the natural numbers and seeing which linear equations are solvable "in a single color". We will see how these basic questions motivated marvelous and modern results.

## Several Math Department Faculty Promoted: Hatley granted tenure, Hoerl, Jauregui, and Wang Become Full Professor

It is with great pleasure that the Math Department can announce that **Professor Jeff Hatley** has passed the rigorous tenure review process and the Board of Trustees has approved his promotion to the rank of Associate Professor of Mathematics. Additionally, in a bountiful year for the department, based on their years of outstanding teaching, research, and service to Union College, **Professors Roger Hoerl, Jeff Jauregui, and Jue Wang** will be promoted to the rank of Full Professor. All four promotions become effective this coming fall term!



The delicious cake at the celebration of Hatley's tenure

### Congratulations!

- Professor Hatley is a number theorist who joined Union in 2015 after completing his PhD at the University of Massachusetts, Amherst. In his research, he studies properties of p-adic Galois representations. His teaching has covered a wide range of courses, from introductory calculus to intermediate-level courses in number theory and cryptology, to leading advanced independent studies in algebraic number theory.
- Professor Hoerl is the department's statistician. After a career at GE and becoming a leading statistician, Hoerl joined Union and started its statistics program, designing all of the current STA courses and founding the college's minor in statistics.
- Professor Jauregui is a geometric analyst (or analytic geometer) whose research involves scalar curvature and explores connections between mass and geometry, linking math and physics.
- Professor Wang is an applied mathematician whose current research focuses on improving medical imaging to develop more accurate medical diagnoses, enhancing early cancer detection.

## Fall Term Registration This Week

This week, registration for fall term classes takes place via Self-Service. If you are looking to take an upper-level math course, the Math Department will be offering several interesting courses that are suitable for math majors and minors.

- **Math 199** is the department's "bridge course," intended to help students make the transition from computationally oriented courses to more theoretical proof-writing courses. This is a **required** course for all math majors and minors that is *usually* taken after Math 115.
- **Math 219 – Discrete Mathematics.** In this course, topics studied may include graph theory, partially ordered sets, the Four-Color Theorem, and more. As a 200-level course, Math 219 is appropriate for students coming from Math 199, as well as more advanced students.
- **Math 221 – Mathematical Cryptology.** This course will provide an in-depth look at the mathematical theory underlying modern methods to accomplish the secret transmission of data. This is another good choice for students coming from Math 199, as well as more advanced students. Note that students generally may not take both Math 221 and Math 235 (Number Theory) – choose wisely!
- **Math 336 – Real Variable Theory.** is a core course that is **required** for math majors. In this course, you will learn some of the theoretical underpinnings of the calculus of functions whose domain lies within the set of *real* numbers.

## Fall Term Job Opportunities: Calculus Help Center Tutor; Math Coach for MTH 105

### CALCULUS HELP CENTER TUTOR

The Math Department is now accepting applications for vacant **Calculus Help Center (CHC) tutoring positions**. Tutors in the fall work in the CHC one fixed night per week, Sunday through Thursday, from 7:30-10:00pm.

Qualifications: Calculus through Math 115 with grades of no less than A-. Preference will be given to students who

- have also completed Math 117 (with a grade  $\geq$  A-),
- are declared math majors,
- are considering becoming a math teacher or pursuing graduate work in mathematics, and
- have other tutoring experience (not necessary, though).

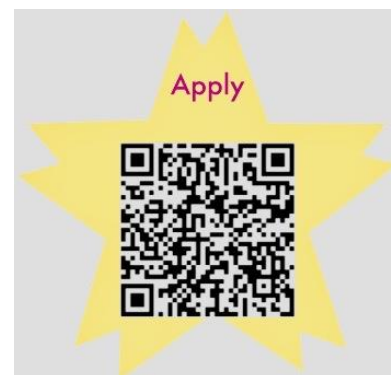
To apply for a position, send an email to Professor Paul Friedman ([friedmap@union.edu](mailto:friedmap@union.edu)) expressing your interest, listing your mathematical background, including coursework (term, professor, and grade) and tutoring experience (if any), and discussing why you think you would be a good tutor.

**Application deadline: Friday, May 26 at NOON**

### MATH COACH for MATH 105

Math Coaches will attend and work with a section of MTH 105 in the fall to assist students with their understanding of course content.

For more information and to apply, use the QR code below. If you have questions, contact **Lesly Clay** at [clayl@union.edu](mailto:clayl@union.edu).



**Calculus Help Center: Spring Term Hours**  
**Sunday, Tuesday, and Thursday: 7:30-10:00pm**  
**Sorum House Seminar Room**