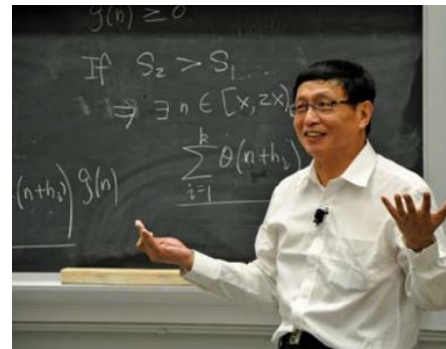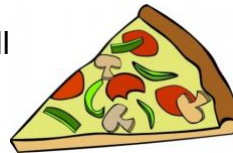## UNDERGRADUATE MATH SEMINAR – Movie Time!

The next **and last** math seminar of the term will

DATE: **THURSDAY, November 10**

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

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

In this seminar, the following movie will be shown

Counting from Infinity
Yitang Zhang and the Twin Prime Conjecture

Description: The Twin Prime Conjecture states that there are infinitely many pairs of prime numbers with exactly one number between them, like 3 and 5, 11 and 13, 17 and 19, 101 and 103, as well as $697053813 \cdot 2^{16352} \pm 1$! This longstanding conjecture is *unproven* and has shown itself to be a hard nut to crack. However, recently, some progress has been made! This movie is about Yitang Zhang and his work toward proving the Twin Prime Conjecture.

From online: *In April 2013, a lecturer at the University of New Hampshire submitted a paper to the Annals of Mathematics. Within weeks word spread: a little-known mathematician, with no permanent job, working in complete isolation, had made an important breakthrough toward solving the Twin Prime Conjecture. Yitang Zhang's techniques for bounding the gaps between primes soon led to rapid progress by the Polymath Group, and a further innovation by James Maynard.*

***Counting from Infinity** is a study of Yitang Zhang's rise from obscurity and a disadvantaged youth to mathematical celebrity. The story of quiet perseverance amidst adversity, and Zhang's preference for thinking and working in solitude, is interwoven with a history of the Twin Prime Conjecture as told by several mathematicians, many of whom have wrestled with this enormously challenging problem in Number Theory—Daniel Goldston, Kannan Soundararajan, Andrew Granville, Peter Sarnak, Enrico Bombieri, James Maynard, Nicholas Katz, David Eisenbud, Ken Ribet, and Terry Tao.*

Friendsgiving Fun: the AWM Dinner with Math Faculty

On Wednesday, November 2, the Union College chapter of the Association of Women in Mathematics (AWM) hosted a "Friendsgiving" dinner with faculty from the Math Department. In addition to enjoying good food together, students and faculty were able to mingle informally and have casual conversation about math *and non-math* topics. It was a wonderful event, and we encourage you look for and participate in upcoming events by AWM, the Math Club, and the Math Department.

Math Department Work-Study Course Assistants Jobs

If you are eligible for work-study and are looking for a job opportunity in the math department, consider applying to become a course assistant. Duties of the position include working directly with the course instructor, grading homework, and possibly holding extra office hours for students. Qualifications for the position include a strong record in calculus courses (grade in the A-range) and possibly MTH 130; successful completion of at least one upper level math course; Math major/minor, though engineering majors are also welcome.

To apply and to see more details, visit HANDSHAKE, looking for Mathematics Course Assistant.