

# Student Chapter Newsletter

## **Welcome Math Clubs**

With the end of official MAA student chapters, we decided to open our newsletter up to all math clubs in our section. We are so excited to include new schools! Does your school have an active math club? If so, we'd love to hear from you. Please send me an email (ellen.panofsky@temple.edu) with your math club adviser's contact information and I'll make sure they are on the next list asking for contributions (early spring 2017). Contributions are easy. Just write about the activities your math club has been doing. We also love to include pictures! I can't wait to hear from you.

### Fall 2016 Meeting

EPaDel's spring meeting will be held at

Villanova University on November 12, 2016.

Deadline for pre-registration is November 2, 2016.

<u>Click here</u> to register online

Click here to register by mail



#### DeSales University Math Club

Imagine being locked in a room with fellow students, where the likelihood you will escape hinges on you and your classmates' ability to solve puzzles and work together. Clues lurk around every corner. Each second that passes brings you and your classmates closer to freedom, but also increases everyone's pressure to escape. While this scenario may seem like the fictitious plot of a mystery movie, it actually happened to members of DeSales University's Math Club during our annual team building event. On Saturday, Nov. 7, 2015, members of the Math Club and our advisor Dr. Ryan went to the Escape Room in Philadelphia. Once there, we were split into two teams of ten, where each team was locked in an office-themed room and had 60 minutes to escape. One of our groups actually managed to escape with less than one minute to spare! The other group was not so lucky but is now determined to escape when we try the newly opened Bethlehem Escape Room next year. Due to the vast amount of clues and puzzles, the most important aspect of the room was working together as a team. It was essential to have communication between everyone to determine which areas of the room had already been checked for clues and which solutions seemed plausible.

While many students would be horrified at the thought of being trapped in a room solving puzzles, we loved it! Thus, in April 2016, we created our own DeSales University Escape Room Fundraiser. We made sure to design our room so that the seemingly unrelated puzzle sequences could be solved in any order but somehow linked together at the end for the final puzzle. In our case, we had four puzzle sequences: one involving a Sudoko puzzle, one involving a historical trivia point about DSU, another involving a painting that was visible from the window of our Escape Room, and most crazily, one having to do with animal sounds. Most participants jumped and laughed when they first heard the animal noises and then quickly went to figuring out what the noises could mean. Each of these puzzles led to a single word that fit into a hidden glow-in-the-dark crossword puzzle that revealed the final "password." All in all, our fundraiser was a success. As a result, we will be creating another Escape Room next year, so be sure to join us next year, if you dare!





Are you an undergraduate who has been working on a project? EPaDel has two great opportunities for you.

- 1. Give a student talk at our fall meeting. Talks should be approximately 10 minutes in length and can be expository or research oriented. Student speakers will receive free registration and a Certificate of Recognition from the MAA. Deadline for submission is October 28, 2016. <u>Click here</u> for more information.
- 2. Submit a paper for the EPaDel Student Mathematical Papers Prize Competition. Submissions are due by June 15, 2017. <u>Click here</u> for more information. The winner of our 2016 Student Paper Competition has been selected, and will be announced soon.

#### La Salle University

In the spring semester, La Salle's math club held a Pi Day celebration that featured an opening presentation by Dr. Stephen Andrilli titled "Humor in Mathematics." A few days later, members of the organization attended the Philadelphia Undergraduate Mathematics Conference Series at Bryn Mawr College, with junior Eric Frazier giving a talk and sophomore Jackson Swindells presenting a poster on summer research. Eric worked as part of a team at the University of Maryland, Baltimore County REU Site: Interdisciplinary Program in High Performance Computing, and Jackson worked jointly with Dr. Janet Fierson through a School of Arts and Sciences summer research grant at La Salle. At the end of March, 14 students were inducted into the Pennsylvania Beta Chapter of Kappa Mu Epsilon; prior to the ceremony, Dr. Kathryn Haymaker of Villanova University delivered an invited address titled "Winning a Bet Using Error-Correcting Codes." This semester, the math club held an individual competition involving mathematical games. In addition to continuing to serve as tutors in local schools, members of the group are also exploring ways in which they might apply their analytical skills to support sports teams on campus.

#### Kings College

King's junior math major students presented their "Axiom Systems" at the 2016 Spring EPADEL meeting held at Muhlenberg College. All math majors must take a proof writing course in their freshman year at King's. Each student is assigned to create an axiom system as their final project in the course. They design their own axioms, and examine their consistency and independency of the models. Further, they make several theorems based on their axiom systems.

As juniors, the students rework their axiom systems they made three years ago in order to give a public presentation such as at mathematics department colloquium or at an EPADEL meeting.



From Left to Right: Dr. Karen McCready, Bridget McGowan, Maria Colaciello, Sharon Flores, Alexandra Weidtman at Muhlenberg College





#### **Bucknell University**

Bucknell's MAA hosts monthly events for members and all those interested. Last spring students gathered to decorate the digits of Pi which were then proudly displayed on the doors throughout the Mathematics Department in celebration of Pi Day. During the month of April, colored eggs were hidden within the mathematics building, each containing mathematics challenges which could be redeemed for prizes based on the difficulty of the problem. This Fall, we kicked off our series with a game night where students and faculty enjoyed snacks while playing some of their favorite board games. October's event is one of the MAA's favorites. We will host a mathematical themed pumpkin event, carving and painting pumpkins to decorate the mathematics building and student lounge.



#### Penn State Abington

The Penn State Abington Math Club provides volunteer tutoring for students taking math courses. Students come to get help each week from members of the club. Some members have competed in a math olympiad competition between Abington and Penn State Hazleton. The math club plans to host lectures, activities, and games, e.g. a Rubik's cube workshop, and also a screening of the movie "The Man Who Knew Infinity" about the life of Indian mathematician Ramanujan..





Top Right: Ellie Seber presents her undergraduate research project called "Resonance in long LC-ladder circuits" she worked on last year with Dr. Mikhail Kagan (Physics).

Below: Current club president, Dylan Palm (baseball cap), tutors another math student.