Department of Mathematics

October 7, 2024

UNDERGRADUATE MATH SEMINAR

The next math seminar will be

DATE: **THURSDAY, October 10**

Time & 12:30 – Refreshments in Bailey 204

12:50 - 1:45 Seminar in Bailey 207 Location:

In this seminar, Professor Caitlin Leverson from Bard College will present the following talk:

Title: A Friendly Introduction to Lagrangian Realizations of Ribbon Cobordisms

Abstract: A knot is an embedding of a circle into a space like R³, which can be thought of as a piece of string that has been tied up and then had the ends glued together. Given two knots, a ribbon cobordism is a particularly nice surface with the two knots as its boundary (think the two circles that are at the boundary of a cylinder). Much work has been done to study these surfaces in the smooth topological setting. However, what happens when we add some geometric conditions and study knots and surfaces in what is called a contact or symplectic manifold? It has long been known that every smooth knot has a Legendrian representative (knot which satisfies some extra geometric conditions). In this talk we will discuss why an analogous statement is true for ribbon cobordisms. Along the way we will give a brief introduction to smooth knots, ribbon cobordisms, Legendrian knots, and Lagrangian cobordisms. This is joint work with John Etnyre.

Math Club Poker "Night" this Friday

This past Friday the Math Club had fun working on a variety of logic puzzles - Sudoku aplenty! In addition, club President Henry Howe posed the following question: A chess board has a king placed each of two opposite corners. Is it possible to cover the remaining squares on the board with 2x1 sized dominos?

Upcoming event: the Math Club welcomes you to join them for Math Club Poker "Night" this **Friday**, **October 11**th at **3:45pm** in Bailey 204! There will be casual games of poker (without real bets), a couple of fun poker-themed probability questions, as well as food and drink. Drop by for a game or two and say hello to vour fellow math enthusiasts!



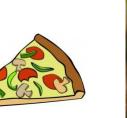
Math club enjoying puzzles and pizza

Pre-Approval Time! MTH 105, 110, 113

Pre-Approval for winter course offerings is now open! This winter term, three math courses require pre-approval: MTH 105, 110, and 113.

If you would like to enroll in any of these courses, you need to complete the math department's Pre-Approval Survey. The due date for this is **October 16**. After the department reviews the pre-approval requests, selected students will be automatically registered for Pre-Approved courses prior to their official registration appointments (which begin October 28).

Calculus Help Center: Sunday – Thursday, 7:30-10:00pm, Sorum House Seminar Room





Professor Caitlin Leverson