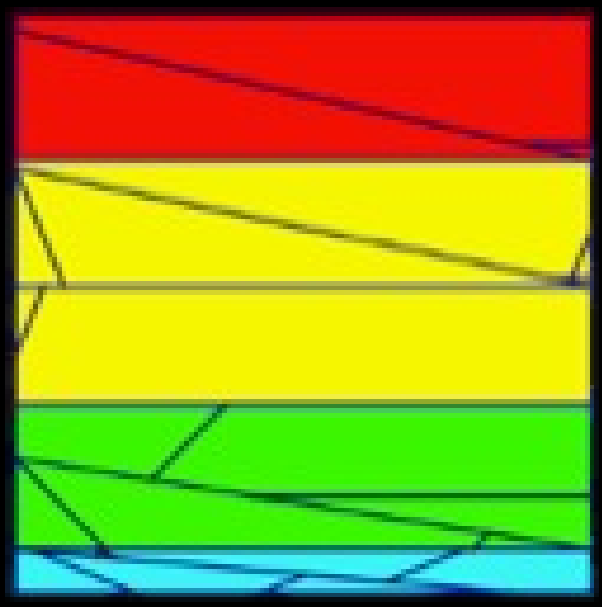

MATH MONDAY - SPRING 2019

PAMELA PIERCE

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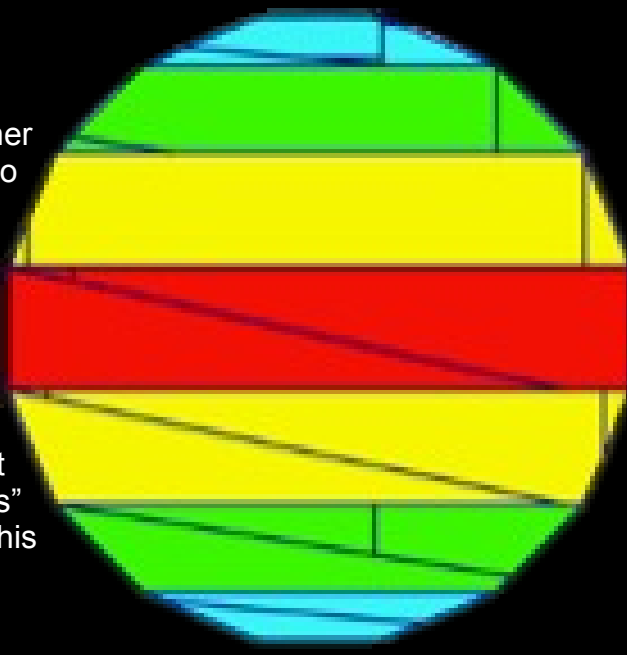
THE CIRCLE SQUARING PROBLEM:
A TALE OF UNDERGRADUATE RESEARCH

Abstract: Tarski's famous Circle-Squaring problem asks whether a circle (a closed disk in the plane) can be decomposed into finitely many pieces which can then be rearranged to form a quare. A definitive answer to this question eluded mathematicians for hundreds of years, until Miklos Laczkovich proved (in 1990) that it is indeed possible. While the answer was celebrated as a great victory, his proof gives no specific directions on how to accomplish the task. Furthermore, the upper bound given for the number of pieces required in the process is 10^50. In this talk we will learn some facts about dissections, decompositions, and what aczkovich's "pieces" actually look like in an effort to fully understand the depth of this problem.



MONDAY - FEBRUARY 4 - 3:10 PM

Franklin Miller, Jr. Lecture Hall - Hayes 109