Ring on a String 2: Group on a Loop

Undergraduate Math Club
CORNELL UNIVERSITY

SPEAKER

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ABSTRACT

In 1911, Toeplitz conjectured that any simple closed curve in $\mathbb{R}^2$ inscribes a square. 107 years later I gave a suspiciously vague talk on some of my ideas for why any two simple closed curves inscribe a parallelogram between them and how it's connected to finding a ring on a string. In this talk, I will present a proof that we may always find parallelograms between curves, alongside a definition of what exactly that means, and argue that this problem is equivalent to a natural generalization of the square peg problem to two curves.

MAY 15 at 2:00pm

Malott 532 ⋆ Refreshments