

# Ring on a String

Undergraduate Math Club  
CORNELL UNIVERSITY



## SPEAKER

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## ABSTRACT

In 1911, Toeplitz famously conjectured that any simple closed curve in  $\mathbb{R}^2$  encloses a square. Over the summer, I didn't prove this but approached the similar problem of whether any two simple closed curves in  $\mathbb{R}^2$  and in  $\mathbb{R}^3$  enclose a parallelogram between them. This problem had a surprising connection with a problem I called ring on a string, which essentially asks whether you can pass a ring along a closed string without ever rotating the ring. I will discuss this connection and progress made thus far on both problems.

# OCT 1 at 5:15pm

Malott 532 ★ Refreshments