

# BI-CO MATHEMATICS COLLOQUIUM

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*“Inscribed polygons and the square  
peg problem”*

**Monday, September 20, 2010**

Talk at 4:15 – KINSC H109

Tea at 4:00 – KINSC Math Lounge, H208

**Abstract:** Does every plane curve contain four points that form a perfect square? This question, first posed by Toeplitz, has now been open for 99 years. The result is known for various classes of plane curves; roughly speaking, if the curve is "not too rough", then we know that an inscribed square exists. In this talk we discuss some new results on inscribed squares and other polygons based on configuration spaces and intersection theory. Among other things, we will outline a proof of a new result that a generic plane curve contains a loop of inscribed triangles of any geometry. The talk will include a number of nice animations.

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