

**CCSU**  
**DEPARTMENT OF MATHEMATICAL SCIENCES**

# **COLLOQUIUM**

**Wednesday, May 20**

**12:00 – 1:00 PM**

**<https://ccsu.webex.com/meet/anton>**

**THE JORDAN CURVE THEOREM REVISITED**

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(Virtual MA in Mathematics Thesis Presentation)

**CENTRAL CONNECTICUT STATE UNIVERSITY**

**Abstract:** We present the statement of the Jordan Curve Theorem in order geometry, provide an elementary proof in Euclidean plane, and focus on two applications: 1) area of a simple polygon and 2) coverage by a network. The first application is developed from the existence of a triangulation for a simple polygon using the Two-Ears Theorem. The second application is based on combinatorial arguments coming from the proof of the Jordan Curve Theorem.

***For further information:***

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