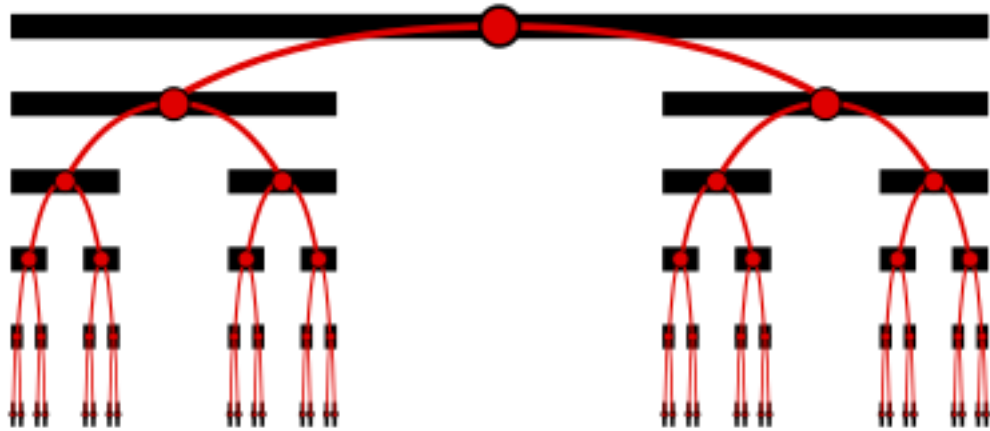# Math Graduate Student Presentation

Allison Donahue

Monday │ April 30, 2018 │ 12:15pm │ ENG 239

Title: Topology of Cantor Sets

Abstract: The purpose of this presentation is to explore the history and topological properties of Cantor Sets. A topological space is defined to be Cantor if it is nonempty, perfect, compact, and totally disconnected. Each of these properties will be addressed with respect to the well-known middle-third Cantor set, and with Antoine's Necklace, a Cantor set in 3-dimensional space. The two spaces will then be compared, and it will be shown that they are homeomorphic.