Title: Unknotting θ-graphs and DNA replication

Speaker: Dr. Danielle O'Donnol, Indiana University

Date: Monday April 24th

Time and Location: 2:00-3:00pm in 8-4

Abstract: Replication is when a single DNA molecule is reproduced to form two new identical DNA molecules. In the middle of replication a more complex structure is formed. When a circular piece of DNA is replicated the intermediate structure is that of a θ-graph. A θ-graph has two vertices and three edges between them. I study embedded graphs and graph embeddings. This talk will focus on my work on unknotting numbers of θ-graphs and understanding DNA replication.