

**Slippery Rock University**  
**Department of Mathematics and Statistics**

*Presents*

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Assistant Professor  
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**“Kemeny’s constant and  
random walks on graphs”**

*Abstract*

Kemeny's constant is an interesting and useful quantifier of how well-connected the states of a Markov chain are. By considering the random walk on a simple, undirected graph, we can regard the value of Kemeny's constant for this Markov chain as a graph parameter with a concrete interpretation in terms of the expected length of a random trip in the graph, thus giving yet another measure of “connectedness” in a graph. This talk will provide an introduction to Markov chains, an overview of the history of Kemeny’s constant, and a survey of recent results for random walks on graphs, along with some open problems.

**Friday, September 18<sup>th</sup>**

**3:00 p.m.**

**<https://sru.zoom.us/j/98352961875>**

**Students are welcome!**