The MATHEMATICS Honors Lecture Series



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Average Shortest Path Length in a Novel Small-World Network

Many real-world networks exhibit the "small world" phenomenon, which is characterized by local clustering of nodes but small graph diameter, making it easy to reach all nodes from any one node in the network. The phenomenon is exemplified by the famous idea that on average, all people are six degrees of separation from each other.



In this talk, we examine a novel model of random graph, which exhibits the structural characteristics of classical small-world network models. We will explore the network structure of the new model, analyze its features, and work toward a result on its average shortest path length.

> Thursday, April 27, 2017 Reception, 4:00 p.m. ~ King 203 Lecture, 4:30 p.m. ~ King 239