Title:

Random Walks on Hyperbolic Graphs and Induced Dirichlet Forms on Self-Similar Sets

Abstract:

Professor Ka-Sing Lau's research in fractal geometry is at the intersection of analysis, probability, and geometry. The probabilistic and geometric aspects are exemplified by his influential series of papers on hyperbolic graphs constructed from self-similar sets, random walks on these graphs as well as their boundary theory and induced Dirichlet forms. In this expositional talk I attempt to explain some of the main ideas and results obtained, including some that resulted from my work with Prof. Lau and Shi-Lei Kong.

Speaker

Leonard Wong