Brownian Motion and Dirichlet Boundary Problem

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Abstract: In this talk, I would like to talk the relationship between Brownian motion and Dirichlet boundary problem. There are no specific prerequisites for audience. Through this talk, I wish I could achieve the following goal:

- 1. Random walk on a graph.
- 2. Solve discrete Dirichlet boundary problem by random walk.
- 3. Some property of Brownian motion.
- 4. Solve Dirichlet boundary problem by Brownian motion.
- 5. Sufficient boundary condition.