Short Course

Random Walks and Electrical Networks

Prof. Pietro Poggi Corradini—Department of Mathematics, Kansas State University

This mini-course will be a gentle introduction to Markov chains, especially random walks on graphs and their connection to electrical networks. The matrix theory that underlies both of these point of views will be reviewed, and then the effective resistance and its various applications to understanding graph structures and dynamic phenomena on graphs will be discussed.

1061 Rathbone - April 19, 26, May 3, from 4:30 to 5:20