

MASS Fall 2007: Probability from the analytic point of view

Projects

Bradley, Ryan: Models for evolution in bacteria, and the optimal mutation rate

Deines, Dory: Electric network proof of Polyá's theorem

Gillespie, Brian: The Arcsine Law for random walks – a combinatorial Proof

Green, Alison: Conditional expectation and the Martingale Convergence Theorem

Gonzalez, Jorge: Regular variation

Jensen, Sarah: Markov Chains in mathematical biology

Lam, Chor-Hang: Law of the Iterated Logarithm

MacDonald, Daniel: Probability theory and the Travelling Salesman Problem

Martinez, Vincent: The existence and continuity of Brownian Motion

Modrak, Ryan: Dvoretzky's theorem on random covering of the circle by arcs

Nezhmetdinov, Timur: Valuations

Pancia, Matthew: Statistical mechanics of the 1D Ising model

Pathak, Noopur: The Google Page Rank Algorithm

Risch, Peter: Stable distributions

Sikander, Sheryar: Proofs of the Carathéodory Extension Theorem and the Fubini-Tonelli Theorem

Tougas, Stephanie. The Olbers Paradox

Tucker-Drob, Robin: Proofs of the Carathéodory Extension Theorem and the Fubini-Tonelli Theorem

Wheeler, Ashley: Applications of the Ehrenfest Urn Model