Submittee: Ed Perkins
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Title: Pacific Northwest Probability Seminar
Event Type: Lecture-Seminar-Series

Location:
U. Washington

Dates:
October 15, 2011

Topic:
Probability

Methodology:
There were 4 40 minute lectures and the one-hour Birnbaum Lecture by Steve Evans.

Scientific Highlights:
Steve Evans (U. Cal. Berkeley) gave an overview of his striking work on aging and mortality. He incorporates mutation, selection and recombination leading to a genotype distribution modeled by a Poisson random measure whose rate evolves according to a explicit dynamical system. The model allows for explicit calculation of equilibria in a number of settings. Jason Miller, Microsoft Research spoke on his work with Scott Sheffield on flow lines associated with the Gaussian free field. As an application they establish the long-conjectured duality between SLE(k) and SLE(16/k). This is a major result.

Organizers:
Burdzy, Chris, Mathematics, U. Washington.

Speakers:
Ori Gurel-Gurevich, U. B. C., Linear Cover Time is Exponentially Unlikely Steven Evans, U. Cal. Berkeley, Time and chance happeneth to them all: Mutation, selection and recombination. Bartek Siudeja, U. Oregon, Heat kernels and spectral theory. Jason Miller, Microsoft Research, Imaginary geometry of the Gaussian free field. Steffen Rhode, U. Washington, Random quasiconformal homeomorphisms.

Links:
http://www.math.washington.edu/~burdzy/nwprob2011.php includes abstracts of all lectures.