

STATISTICS COLLOQUIUM

FRIDAY, FEBRUARY 15, 2008

TALK: 4:00 PM — SCIENCE CENTER RM. 309

RECEPTION: 5:15 PM — SCIENCE CENTER, 7TH FLOOR

“From Markov chains to Gaussian priors and back”

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ABSTRACT

The Dynkin isomorphism associates a Gaussian field to a Markov chain. These Gaussian fields can be used as priors for prediction and time series analysis. The older construction gives fields with all positive covariances. A parallel construction of Diaconis-Evans gives fields with all covariances negative. This work is extended to allow general covariance sign patterns.