

SEMINARIO

MODELAMIENTO ESTOCÁSTICO

EXPOSITOR

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TITLE

Yaglom limits can depend on the initial state

Abstract:

To quote the economist John Maynard Keynes: "The long run is a misleading guide to current affairs. In the long run we are all dead." It makes more sense to study the state of an evanescent system given it has not yet expired. For a substochastic Markov chain with kernel K on a state space S with killing this amounts to the study of the Yaglom limit; that is the limiting probability the state at time n is y given the chain has not been absorbed; i.e. $\lim_{n \rightarrow \infty} K^n(x, y) / K^n(x, S)$.

We give an example where the Yaglom limit depends on the starting state x . We explain this phenomenon by showing that when the ρ -Martin entrance boundary is non-trivial the Yaglom limit may depend on the starting state of the Markov chain. The proof involves an analysis of the space-time ρ -Martin entrance boundary.

Lunes 16 de Enero a las 17:00 hrs, Sala de Seminarios CMM John Vob Neumann, ubicada en Beauchef 851, Torre Norte Piso 7.

