

Title: Stochastic equations and model reduction for continuous time Markov chains

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Abstract:

The desire to model biological cellular reaction networks has caused renewed interest in classical Markov chain models for chemical reactions. Study of the biological systems has led to a variety of new questions, in particular, a search for ways of simplifying complex models. The talk is intended to be introductory and will describe some of the tools and intuition that have proved useful in analyzing these models.