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A POINT ON DISCRETE VERSUS CONTINUOUS STATE-SPACE
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Abstract

In this poster, I will explore the impact of discrete marginals on copula-based Markov chains. We analyze the mixing properties of such models to emphasize the difference between continuous and discrete state-space Markov chains. The Maximum likelihood approach is applied to derive estimators for model parameters in the case of a discrete-state space Markov chain with Bernoulli marginal distribution. A stationary case and a non-stationary case are considered. The asymptotic distributions of parameter estimators are provided. A simulation study showcases the performance of different estimators for the Bernoulli parameter of the marginal distribution. Some statistical tests are provided for model parameters.