



Markov Approximations of chains of infinite order in the \bar{d} -metric

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We derive explicit upper bounds for the \bar{d} -distance between a chain of infinite order and its canonical k -steps Markov approximation. Our proof is entirely constructive and involves a "coupling from the past" argument. The new method covers non necessarily continuous probability kernels, and chains with null transition probabilities. These results imply in particular the Bernoulli property for these processes.

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