A Non-Markovian Process with Unbounded p-Variation

Martynas Manstavicius, University of Connecticut, USA

Abstract

A recent theorem by M. Manstavicius (2004) provided a link between a certain function of transition probabilities of a strong Markov process and the boundedness of the p-variation of its trajectories. Here one assumption of that theorem is relaxed and an example is constructed to show that the Markov property cannot be easily dispensed with.

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