

Seminário de sistemas dinâmicos e estocásticos

Departamento de Matemática - IMECC - UNICAMP

Partition Markov Models.

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Resumo:

The Partition Markov Model characterizes the process by a partition L of the state space, where the elements in each part of L share the same transition probability to an arbitrary element in the alphabet. This model aims to answer the following questions: what is the minimal number of parameters needed to specify a Markov chain and how to estimate these parameters. In order to answer these questions, we build a consistent strategy for model selection which consists of: giving a size n realization of the process, finding a model within the Partition Markov class, with a minimal number of parts to represent the process law. From the strategy, we derive a measure that establishes a metric in the state space. In addition, we show that if the law of the process is Markovian, then, eventually, when n goes to infinity, L will be retrieved. Joint work with Veronica A. Gonzalez-Lopez.

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Local: Sala 321 do IMECC.

Consulte a programação em [www.ime.unicamp.br/ssde]