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**Fast simulation for road traffic network.** (English) [Zbl 1098.90513](#)

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Summary: In this paper we present a method to perform fast simulation of large Markovian systems. This method is based on the use of three concepts: Markov chain uniformization, event-driven dynamics, and modularity. An application of urban traffic simulation is presented to illustrate the performance of our approach.

**MSC:**

**90B18** Communication networks in operations research

**90B20** Traffic problems in operations research

**Keywords:**

Markov chains, stochastic automata networks, simulation, stochastic modeling

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