

AVERAGING FOR SOME SIMPLE CONSTRAINED MARKOV PROCESSES

Alexandre Genadot

Abstract: In this paper, a class of piecewise deterministic Markov processes with underlying fast dynamic is studied. By using a “penalty method”, an averaging result is obtained when the underlying dynamic is infinitely accelerated. The features of the averaged process, which is still a piecewise deterministic Markov process, are fully described.

2000 AMS Mathematics Subject Classification: Primary: 60J99; Secondary: 34A38, 34C29.

Keywords and phrases: Piecewise deterministic Markov process, averaging, constrained Markov process.

THE FULL TEXT IS AVAILABLE [HERE](#)