
Rate of convergence of the Euler scheme for SDE with discontinuous drift

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Abstract

During this talk, we present some results concerning the weak rate of convergence of the Euler scheme for SDE with discontinuous drift. For this, we present a general approach which combined considerations on the class of regularity of drifts as well as the class of terminal conditions. From this, using Girsanov theorem, Malliavin calculus and analysis of PDE, several rates could be deduced. The sub-optimality of some rates of also discussed. *Collaboration with Arturo Kohatsu-Higa (Ritsumeikan University, Kyoto, Japan) and Kazuhiro Yasuda (Hosei University, Tokyo).*

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