Probabilistic representation of nonlinear SPDEs via Backward doubly stochastic differential equations

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Abstract

We present an overview on theoretical and numerical studies of standard and second order backward doubly stochastic differential equation (BDSDE or 2BDSDE) and we investigate theirs links with a several classes of parabolic fully nonlinear Stochastic PDEs.

*Punctual, i.e. sine tempore!