



On Approximation of the Backward Stochastic Differential Equation

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(Submitted on 16 May 2013)

We consider the problem of approximation of the solution of the backward stochastic differential equation in the Markovian case. We suppose that the trend coefficient of the diffusion process depends on some unknown parameter and the diffusion coefficient of this equation is small. We propose an approximation of this solution based on the one-step MLE of the unknown parameter and we show that this approximation is asymptotically efficient in the asymptotics of "small noise".

Comments: 18 pages

Subjects: **Statistics Theory (math.ST)**; Probability (math.PR)

MSC classes: 62M05

Cite as: [arXiv:1305.3728](https://arxiv.org/abs/1305.3728) [math.ST]

(or [arXiv:1305.3728v1](https://arxiv.org/abs/1305.3728v1) [math.ST] for this version)

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