

## DEPENDENT NOISE FOR STOCHASTIC ALGORITHMS

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*Abstract:* We introduce different ways of being dependent for the input noise of stochastic algorithms. We are aimed to prove that such innovations allow to use the ODE (ordinary differential equation) method. Illustrations to the linear regression frame and to the law of large numbers for triangular arrays of weighted dependent random variables are also given.

**2000 AMS Mathematics Subject Classification:** Primary 62L20; Secondary 62J05.

**Key words and phrases:** Stochastic approximation, ordinary differential equations, dependent noise, linear regression.

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