A STUDY OF A STOCHASTIC DIFFERENTIAL EQUATION WITH REFLEXION FOR IMAGE PROCESSING

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SUMMARY

In this work, we explore stochastic differential equations (SDEs) and show their usefulness in image processing. In particular we study SDEs with reflection, where the drift and the diffusion terms are formulated to express the concept of the SDE anisotropy, with a diffusion parameter depending on the image geometry. Here we present a theoretical result on the well posedness of the proposed model.

Keywords and phrases: Stochastic differential equations, reflexion, image restoration, well posedness.

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