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Fill's Algorithm for Absolutely Continuous Stochastically Monotone Kernels

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Abstract

Fill, Machida, Murdoch, and Rosenthal (2000) presented their algorithm and its variants to extend the perfect sampling algorithm of Fill (1998) to chains on continuous state spaces. We consider their algorithm for absolutely continuous stochastically monotone kernels, and show the correctness of the algorithm under a set of certain regularity conditions. These conditions succeed in relaxing the previously known hypotheses sufficient for their algorithm to apply.

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