

FINITENESS OF ENTROPY FOR GRANULAR MEDIA EQUATIONS

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Abstract: The current work deals with the granular media equation whose probabilistic interpretation is the McKean–Vlasov diffusion. It is well known that the Laplacian provides a regularization of the solution. Indeed, for any $t > 0$, the solution is absolutely continuous with respect to the Lebesgue measure. It has also been proved that all the moments are bounded for positive t . However, the finiteness of the entropy of the solution is a new result which will be presented here.

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