

Some properties of stochastic flows with interaction.

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Abstract

For a stochastic flow describing the behavior of a system of interacting particles an existence theorem, Markov properties, asymptotic behavior are considered. Also a flow which is driven by a generalized function is built. A combination of a flow with interaction and Arratia flow gives a coalescing flow with interaction for which an existence theorem is proved by applying an analogue of Girsanov theorem.