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On properties of a flow generated by an SDE with discontinuous drift. (English)

Summary: We consider a stochastic flow on $\mathbb{R}$ generated by an SDE with its drift being a function of bounded variation. We show that the flow is differentiable with respect to the initial conditions. Asymptotic properties of the flow are studied.

MSC:
- 60H10 Stochastic ordinary differential equations (aspects of stochastic analysis)
- 60J65 Brownian motion

Keywords:
- stochastic flow;
- local times;
- differentiability with respect to initial data

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