On Stochastic Scalar Conservation Laws with Boundary Conditions

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Abstract: In this talk we will review recent results for stochastic scalar conservation laws on bounded domains. We start with the well-posedness theory for stochastic scalar conservation laws with boundary conditions. We then discuss various type of solutions to the boundary value problems. Finally, we will give a positive answer to an open problem posed by Bauzet, Vallet and Wittbold in “The Dirichlet problem for a conservation law with a multiplicative stochastic perturbation”, J. Funct. Anal. 266 (2014) 2503-2545. The talk is based on joint work with Guangying Lv (Henan University, China).

References


