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On a class of stochastic transport equations for L^2_{loc} vector fields

Abstract

We study in this talk the existence and uniqueness of solutions to a class of stochastic transport equations with irregular coefficients. Asking only boundedness of the divergence of the coefficients (a classical condition in both the deterministic and stochastic setting), we can lower the integrability regularity required in known results on the coefficients themselves and on the initial condition, and still prove uniqueness of solutions.