

A semigroup approach to quasilinear rough PDEs

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We investigate quasilinear parabolic evolution equations driven by a γ -Hölder rough path, where $\gamma \in (1/3, 1/2]$. This includes the Brownian motion and a fractional Brownian motion with Hurst index $H \in (1/3, 1/2]$. We explore the mild formulation combining functional analytic techniques with the controlled rough paths approach. We apply our results to the stochastic Landau-Lifshitz-Gilbert equation. This talk is based on a joint work with Antoine Hocquet.