

Fractional stochastic wave equation driven by a Gaussian noise rough in space

Xiaoming Song (Drexel University)

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In this talk, we consider fractional stochastic wave equations on \mathbb{R} driven by a multiplicative Gaussian noise which is white/colored in time and has the covariance of a fractional Brownian motion with Hurst parameter $H \in (\frac{1}{4}, \frac{1}{2})$ in space. We prove the existence and uniqueness of the mild Skorohod solution, establish lower and upper bounds for the p -th moment of the solution for all $p \geq 2$, and obtain the Hölder continuity in time and space variables for the solution.