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A linear stochastic differential equation driven by a fractional Brownian motion with Hurst parameter $>1/2$

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Given a fractional Brownian motion $\{B_t^H\}_{t \geq 0}$, with Hurst parameter $H > 1/2$, we study the properties of all solutions of $X_t = B_t^H + \int_0^t X_u d\mu(u)$, $0 \leq t \leq 1$. A different stochastic calculus is required for the process because it is not a semimartingale.

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