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THE DEPENDENCE STRUCTURE OF THE FRACTIONAL ORNSTEIN-UHLENBECK PROCESS

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Abstract: Let $X(t)$ be a fractional Lévy motion of Riemann-Liouville type and let $Y(t)$ be a corresponding fractional stable Ornstein-Uhlenbeck process obtained through the Lamperti transformation of $X(t)$. We investigate the asymptotic dependence structure of the stationary process $Y(t)$ as $t \to \infty$ and we show that $Y(t)$ does not have the long-memory property.

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