

# STRONG FELLER PROPERTY FOR SDES DRIVEN BY MULTIPLICATIVE CYLINDRICAL STABLE NOISE

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We consider the stochastic differential equation  $dX_t = A(X_{t-})dZ_t$ ,  $X_0 = x$ , driven by cylindrical  $\alpha$ -stable process  $Z_t$  in  $\mathbb{R}^d$ , where  $\alpha \in (0, 1)$  and  $d \geq 2$ . We assume that the determinant of  $A(x) = (a_{ij}(x))$  is bounded away from zero, and  $a_{ij}(x)$  are bounded and Lipschitz continuous. We show that for any fixed  $\gamma \in (0, \alpha)$  the semigroup  $P_t$  of the process  $X_t$  satisfies  $|P_t f(x) - P_t f(y)| \leq ct^{-\gamma/\alpha} |x - y|^\gamma \|f\|_\infty$  for arbitrary bounded Borel function  $f$ . Our approach is based on Levi's method.