

TANAKA FORMULA FOR STRICTLY STABLE PROCESSES

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Abstract: For symmetric Lévy processes, if the local times exist, the Tanaka formula has already been constructed via the techniques in the potential theory by Salminen and Yor (2007). In this paper, we study the Tanaka formula for arbitrary strictly stable processes with index $\alpha \in (1, 2)$, including spectrally positive and negative cases in a framework of Itô's stochastic calculus. Our approach to the existence of local times for such processes is different from that of Bertoin (1996).

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