

Barlow, M. T.

Necessary and sufficient conditions for the continuity of local time of Lévy processes.

(English) [Zbl 0666.60072](#)

Ann. Probab. 16, No. 4, 1389-1427 (1988).

The author and *J. Hawkes* [*C. R. Acad. Sci., Paris, Sér. I* 301, 237-239 (1985; [Zbl 0584.60087](#))] obtained a sufficient condition for the joint continuity of the local time process $(x, t) \rightarrow L_t^x$, where L_t^x is local time at x , for a class of one-dimensional Lévy processes. In this paper, the author succeeds in showing that the sufficient condition is also necessary. In addition, he obtains an exact modulus of continuity for $x \rightarrow L_t^x$ for a wide class of processes.

Reviewer: J.B.Mitro

MSC:

[60J55](#) Local time and additive functionals

[60G17](#) Sample path properties

[60J99](#) Markov processes

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