A FAMILY OF SYMMETRIC STABLE-LIKE PROCESSES AND ITS GLOBAL PATH PROPERTIES

Yasuki Isozaki
Toshffiiro Uemura

Abstract: We extend the idea of the symmetric stable-like processes so that it includes the Brownian motion as well as the symmetric α-stable processes. We exhibit some sufficient conditions for their recurrence and conservativeness relying on the notion of Dirichlet forms. A criterion for conservativeness (Lemma 3.2) is also shown in terms of general Dirichlet forms and the associated generators.

2000 AMS Mathematics Subject Classification: 60J7S, 60G17.

Key words and phrases: Stable-like processes, recurrence, transience.

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