Conservation property of symmetric jump processes

Toshihro Uemura
School of Business Administration,
University of Hyogo,
Gakuen-Nishi, Nishi, Kobe Japan 651-2197
Email:uemura@biz.u-hyogo.ac.jp

Abstract

Many papers concerning the conservation property for various Markov processes are known so far. In particular, the conservativeness for symmetric diffusion processes is known as giving the volume growth conditions with respect to the 'intrinsic metric' relative to the processes. On the other hand, there are few papers for which the conservativeness property is derived in the case of jump processes. In this talk, we will focus on symmetric jump processes and give a condition on the jump (Lévy) kernel to derive the conservation property.