Randall Swift* (rjswift@cpp.edu), Department of Mathematics and Statistics, Pomona, CA 91711. From Additive Processes to Second-Order Processes. Preliminary report.

The familiar Poisson process is a member of a class of stochastic processes known as Additive processes. This broad class also contains the birth-death processes. Second-order processes are processes with two moments finite. The class of second-order processes include the well-known weakly stationary processes as well as harmonizable processes.

In this talk, a natural evolution of concepts linking the class of additive processes and the class of second-order processes will be detailed. The connection arises via stable processes and random measures. The talk will provide an overview of this broad area of study. Some open problems will be mentioned. (Received September 01, 2019)